Service Manu

Cassette Deck

RS-M02

Direct-Drive Concise Cassette Deck with Metal Tape Recording Capability

Black Face Silver Face

DOLBY SYSTEM



This is the Service Manual for the following areas.

D · · · · For All European areas except United Kingdom.

B For United Kingdom.

N For Asia, Latin America, Middle East and Africa areas.

A For Australia.

RS-M85 MECHANISM SERIES

Specifications

Track system:

Fast forward and

4-track 2-channel stereo recording and playback

4.8 cm/s

Tape speed: Now and Jutter:

0.035% (WRMS), \pm 0.10% (DIN)

Frequency response: Metal tape;

20-20,000 Hz 30-18,000 Hz (DIN)

30-17.000 Hz ± 3 dB

 $(0 \text{ VU}) 40 - 13,000 \text{ Hz } \pm 3 \text{ dB}$

CrO₂/Fe-Cr tape: 20 – 18,000 Hz

30 – 18,000 Hz (DIN)

30-16,000 Hz ± 3 dB

20-18.000 Hz Normal tape;

30 – 16,000 Hz (DIN)

 $30 - 14,000 \, \text{Hz} \pm 3 \, \text{dB}$

Signal-to-noise ratio: Dolby NR in; 68 dB (above 5 kHz)

Dolby NR out; 58 dB (signal level = max. record-

ing level, Fe-Cr/CrO2 type tape)

rewind time: Approx. 80 seconds with C-60 cassette tape

MIC; sensitivity 0.25 mV, applicable microphone Inputs:

impedance $400\Omega - 10 k\Omega$

LINE; sensitivity 60 mV, input impedance $47\,k\Omega$

Outputs:

Heads:

LINE; output level 650 mV, load impedance

 $22k\Omega$ over

HEADPHONE; output level 75 mV, load imped-

ance 8Ω

Bias frequency:

85 kHz

Motors: 2-motor system

Capstan; FG servo control direct-drive motor

Reel table; 1-DC coreless motor

1-SX (Sendust Extra) head for record/playback 1-Sendust/ferrite double-gap head for erasure

Power requirements: AC; 110/125/220/240 V, 50-60 Hz

Preset power voltage;

240 V for United Kingdom and Australia

220 V for Europe

Power consumption: 24 W

Dimensions:

 $29.7 \text{cm}(W) \times 9.7 \text{cm}(H) \times 22.9 \text{cm}(E)$

Weight: 5.5 kg

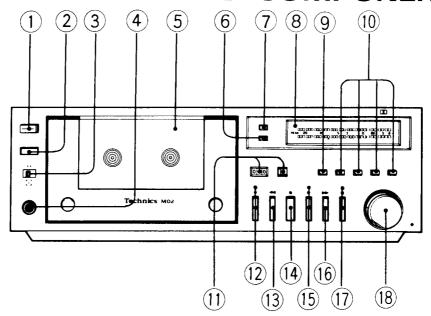
Specifications are subject to change without notice.

* 'Dolby' and the double-D symbol are trademarks of Dolby Laboratories.

Technics

P.O. Box 288, Central Osaka Japan

LOCATION OF CONTROLS AND COMPONENTS



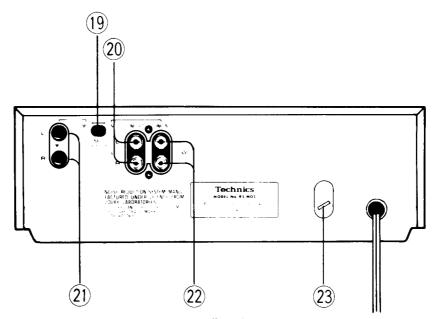
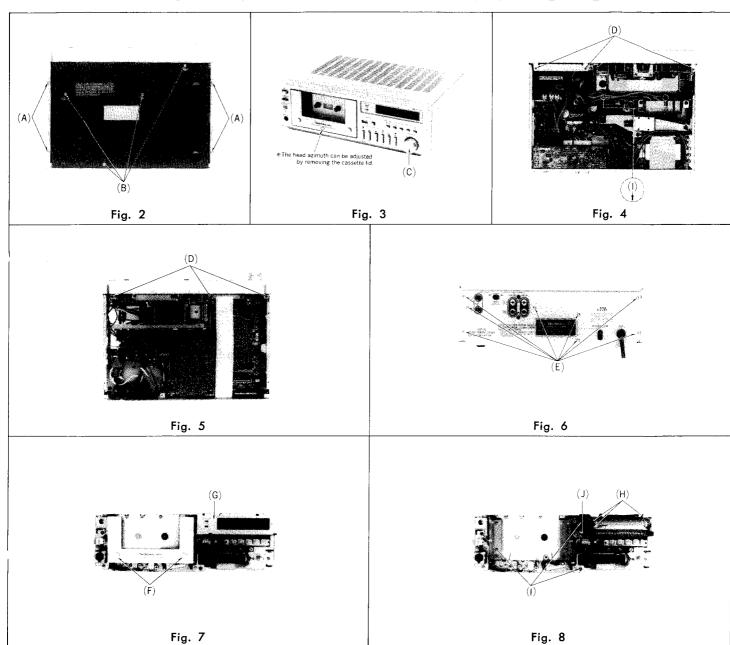


Fig. 1

- ① Eject button (eject)
- ② Power switch (power)
- 3 Timer start switch (timer rec)
- 4 Headphones jack (phones)
- **⑤** Cassette holder
- Microphone indication lamp (mic)
- ① Dolby noise-reduction indication lamp (Dolby NR)
- 8 FL (fluorescent level) meters
- Dolby noise-reduction switch (Dolby NR)
- (1) Tape selectors (tape select-normal/Fe-Cr/CrO2/Metal)
- ① Tape counter and Reset button (counter)
- Record button/Record-muting button with LED (rec rec mute)

- Rewind button (rew ◀ ◀)
- ⊕ Stop button (stop ■)
- ⑤ Play button with LED (play ▶)
- ⑥ Fast forward button (ff ▶ ▶)
- n Pause button with LED (pause II)
- (B) Input level controls (input level)
- (9) Input selector (INPUT SELECTOR MIC/LINE)
- 20 Line output jacks (LINE OUT)
- 2) Microphone jacks (MIC)
- Line input jacks (LINE IN)
- Voltage selector (VOLTAGE SELECTOR)

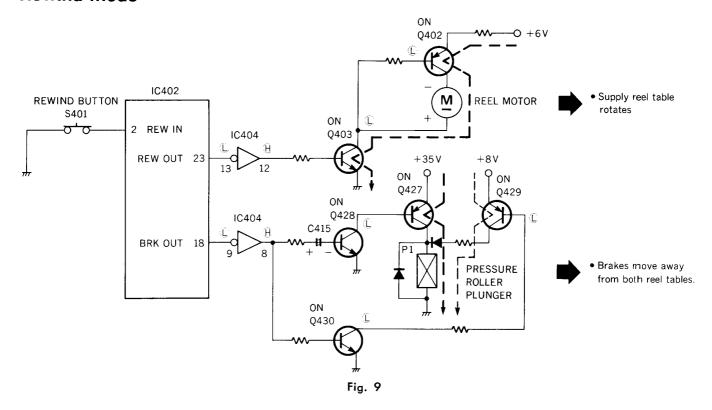
DISASSEMBLY INSTRUCTIONS



Procedure	To remove ——	Remove —	Shown in fig. $$.
1	Case cover	• 4 screws (A)	2
2	Bottom cover	• 4 screws · · · · (B)	2
3	Front panel	• Control knob(C) • 6 red screws(D)	3 4, 5
3	Back cover	• 8 screws ·····(E)	6
3	Cassette lid	• 2 cassette lid holders · · · · · (F)	7
6	FL level meter	Meter cover(G) 3 meter holders(H)	7 8
6	Mechanism	• 5 red screws · · · · · (I) • Counter belt · · · · (J)	4, 8 8

MAIN CONTROL CIRCUIT OPERATION

Rewind mode



Fast forward mode

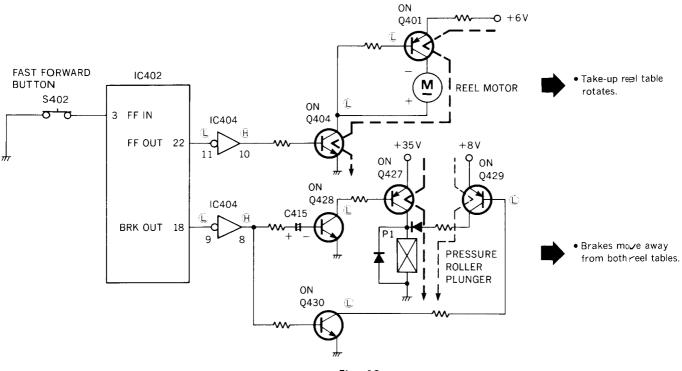
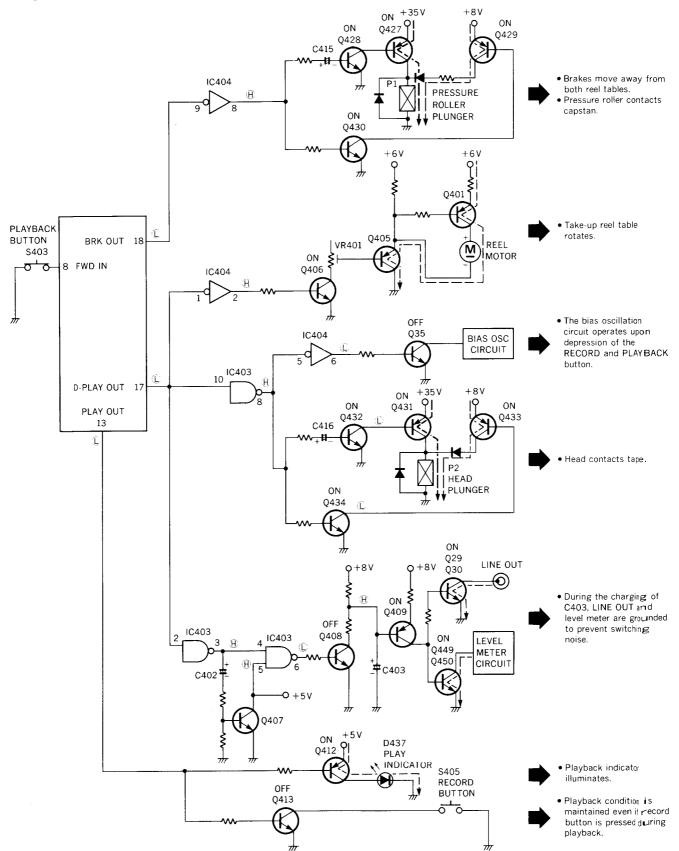


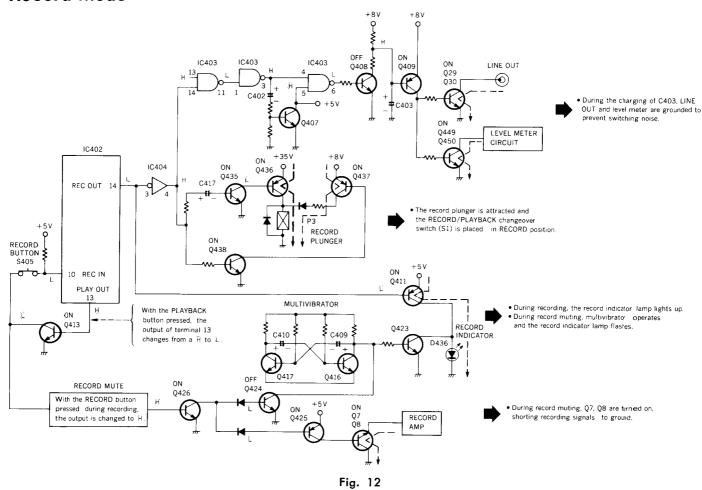
Fig. 10

Playback mode



RS-M02

Record mode



Pause mode

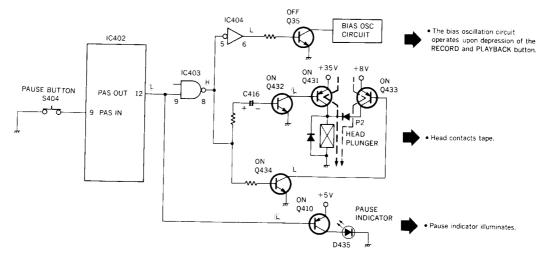


Fig. 13

Timer recording/playback

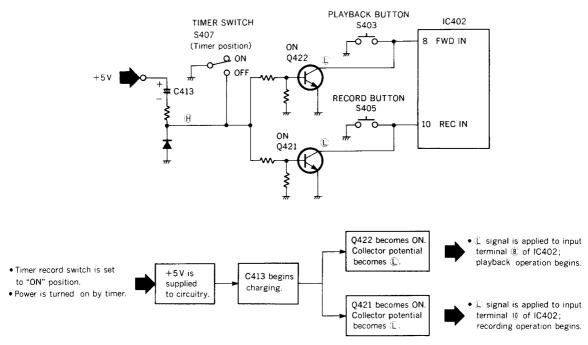


Fig. 14

Full automatic stop

becmos

ON or OFF.

either

the pole closer to

IC401 will be N or S.

If IC401 is OFF:

C411 discharges

and base potential of Q418 increases.

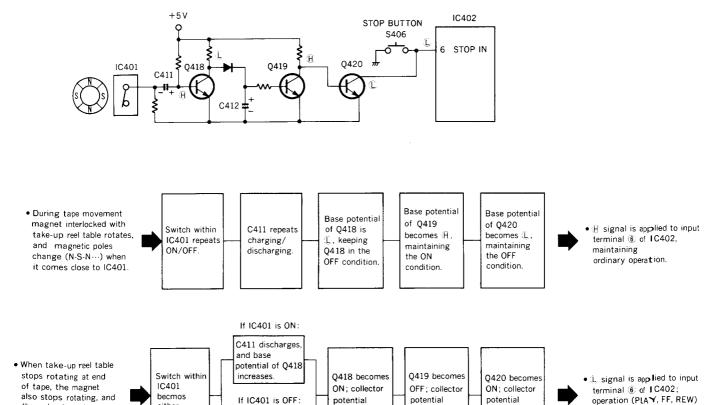


Fig. 15

potential

becomes (L)

potential

becomes (i)

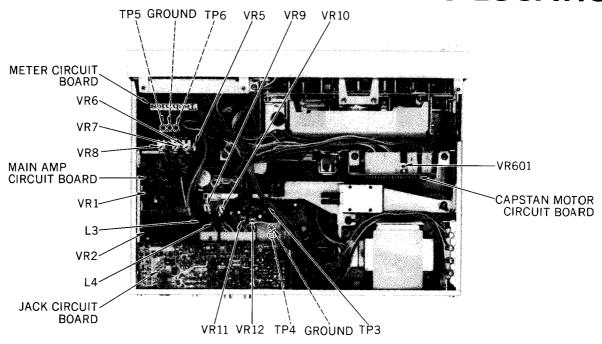
potential

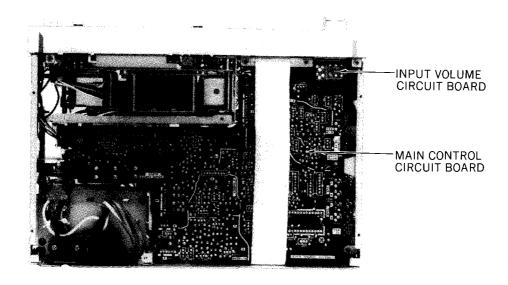
becomes L

operation (PLAY, FF, REW)

automatically 5 tops.

CIRCUIT BOARDS AND ADJUSTMENT PARTS LOCATION





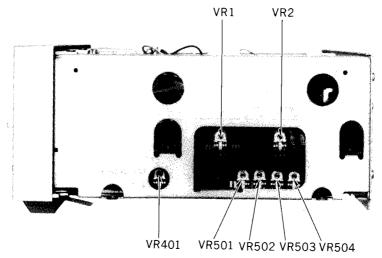


Fig. 16

MEASUREMENT AND ADJUSTMENT METHODS

NOTE: Set lever switches and controls in the following positions, unless otherwise specified.

- Make sure heads are clean.
- Make sure capstan and pressure roller are clean.
- Judgeable room temperature: 20±5°C (68±9°F)
- Dolby NR switch: OUT

- Tape selector: Normal
- Input selector: Line in
- Input level control: Maximum

ITEM	MEASUREMENT & ADJUSTMENT		
⚠ Takeup tension Condition: * Playback mode Equipment: * Cassette torque meter (QZZSRKCT)	 Mount cassette torque meter on UNIT. Place UNIT into playback mode and read takeup torque. Measure several times and determine the mean value. Standard value: 35±5 gr-cm If measured value is not in standard, adjust VR401. 		
Head azimuth adjustment Condition: * Playback mode Equipment: * VTVM * Oscilloscope * Test tape (azimuth)	Record/playback head adjustment 1. Test equipment connection is shown in fig. 17. 2. Playback azimuth tape (QZZCFM 8kHz). 3. Adjust record/playback head angle adjustment screw (B) in fig. 18 so that output level at LINE OUT becomes maximum. 4. Measure both channels, and adjust levels for equal output. 5. After adjustment lock head adjustment screw with lacquer. Erase head adjustment 1. Test equipment connection is the same above but use the tape path viewer (QZZCRD) instead of test tape (QZZCFM). 2. Playback this tape. 3. Adjust screw (C) shown in fig. 19 so that the tape may not get curled or malformed by tape guide of the erase head. 4. After adjustment, lock head adjust screw with lacquer.		
© Tape speed Condition: * Playback mode Equipment: * Digital electronic counter * Test tape ··· QZZCWAT	 Tape speed accuracy Test equipment connection is shown in fig. 20. Playback test tape (QZZCWAT 3,000Hz), and supply playback signal to frequency counter. Measure this frequency. On the basis of 3,000 Hz, determine value by following formula: Tape speed accuracy = f-3,000/3,000 × 100 (%) where, f = measured value Take measurement at middle section of tape. Standard value is not within standard, adjust VR601. Tape speed fluctuation Make measurements in same manner as above (beginning, middle and end of tape), and determine the difference between maximum and minimum values and calculate as follows: Tape speed fluctuation = f1-f2/3,000 × 100 (%) f1 = maximum value, f2 = minimum value Standard value: Less than 0.3% 		

LOIN-SE

ITEM	MEASUREMENT & ADJUSTMENT		
 ▶ Playback frequency response Condition: Playback mode Equipment: VTVM Oscilloscope Test tape ··· QZZCFM 	1. Test equipment connection is as same as "Head azimuth adjustment" but use the test tape (QZZCFM) instead of head azimuth tape (See fig. 17). 2. Place UNIT into playback mode. 3. Playback the frequency response test tape (QZZCFM). 4. Measure output level at 12.5 kHz, 8kHz, 4kHz, 1kHz, 250 Hz, 125 Hz and 63 Hz, and compare each output level with the standard frequency 315 Hz, at LINE OUT. 5. Make measurement for both channels. 6. Make sure that the measured value is within the range specified in the frequency response chart.		
Playback gain Condition: * Playback mode Equipment: * VTVM * Oscilloscope * Test tape ··· QZZCFM	 Test equipment connection is shown in fig. 17. Playback standard recording level portion on test tape (QZZCFM 315 Hz), and using VTVM measure the output level at LINE OUT jack. Make measurement for both channels. Standard value: 0.65±0.10 V Adjustment If measured value is not standard, adjust VR11 (L-CH), VR12 (R-CH) (See fig. 16). After adjustment, check "Playback frequency response" again. 		
 ➡ Bias leak Condition: * Record mode * Input level control ··· MAX Equipment: * VTVM * Oscilloscope 	 Test equipment connection is shown in fig. 22 (See AMP circuit board on page 10). Place UNIT into record mode. Adjust trap coils L3 (L-CH), L4 (R-CH), so that measured value becomes minimum (See fig. 16). Make adjustment for both channels. Fig. 22 Record mode 13(L-CH) Record mode 13(L-CH) 14(R-CH) 175(L-CH) TP5(L-CH) TP5(L-CH) TP6(R-CH) Fig. 22		
© Erase current Condition: * Record mode Equipment: * VTVM * Oscilloscope	 Test equipment connection is shown in fig. 23. Place UNIT into record mode and measure voltage at test point 7. Determine erase current with the following formula: Erase current (A) = Voltage across both ends of R274 1 (Ω) Standard value: 95 ± 5 mA (Tape selector ··· Metal) If measured value is not within standard, adjust VR8. 		
Bias current Condition: * Record mode * Bias adjustment control Center Equipment: * VTVM * Oscilloscope	 A. Adjustment for metal position 1. Test equipment connection is shown in fig. 24. 2. Place the test tape (QZZCRZ) in the cassette holder. 3. Press the record and pause buttons. 4. Set the tape selector to metal position. 5. Supply 1 kHz signal from AF oscillator, through ATT to LINE IN. 6. Adjust ATT so that input level is -20 dB below standard recording level. 7. At this time, LINE OUT level indicates 0.065 V. 8. Record 1 kHz and 15 kHz signals. 9. Playback and express in dB the difference between output levels of 15 kHz and 1 kHz. 10. Make sure output level of 15 kHz is not within -1 ± 3 dB compared with output level of 1 kHz. 11. If measured value is not within -1 ± 3 dB, adjust VR9 (L-CH only). Fig. 25 		

ITEM	MEASUREMENT & ADJUSTMENT		
	 B. Adjustment for normal position 12. Set the tape selector to normal position (test tape QZZCRA). 13. Change test tape to normal tape (QZZCRA). 14. Press the record and playback buttons. 15. Record 1 kHz and 13 kHz signals. 16. Playback and express in dB the difference between output levels of 13 kHz and 1 kHz. 17. Make sure output level of 13 kHz is not within 0±3 dB compared with output level of 1 kHz. 18. If measured value is not within 0±3 dB, adjust VR5 (L-CH, R-CH), VR10 (R-CH). 		
	C. Adjustment for Fe-Cr and CrO ₂ positions 19. Set the tape selector to Fe-Cr position. 20. Change test tape to Fe-Cr tape (QZZCRY). 21. Press the record and playback buttons. 22. Record 1 kHz and 14 kHz signals. 23. Playback and express in dB the difference between output levels of 14 kHz and 1 kHz. 24. Make sure output level of 14 kHz is not within 0±3 dB , compared with output level of 1 kHz. 25. If measured value is not within 0±3 dB , adjust VR6. 26. Set the tape selector to CrO ₂ position. 27. Change test tape to CrO ₂ tape (QZZCRX). 28. Make the same measurements described in steps 21 to 24 above. 29. If measured value is not within 0±3 dB , adjust VR7.		
	 Measurement Test equipment connection is shown in fig. 25. Place UNIT into record mode. Read voltage on VTVM and calculate bias current by following formula:		
● Overall gain Condition: * Record/playback mode * Input level control ··· MAX * Standard input level: MIC ········· - 72 ± 3 dB LINE IN ···· - 24 ± 3 dB Equipment: * VTVM * AF oscillator * ATT * Oscilloscope * Test tape (reference blank tape) ··· QZZCRA for Normal ··· QZZCRX for CrO2 ··· QZZCRY for Fe-Cr ··· QZZCRZ for Metal	 Test equipment connection is shown in fig. 26. Place UNIT into record mode. Supply 1 kHz signal (-24 dB) from AF oscillator, through ATT to LINE IN. Adjust ATT until monitor level at LINE OUT becomes 0.65 V. Using test tape, make recording. Playback recorded tape, and measure the output level at LINE OUT on VTVM. Standard value: 0.65±0.10 V If measured value is not within standard, adjust the following VR. VR1 (L-CH), VR2 (R-CH) 		
● Fluorescent meter Condition: * Record mode * Input level control ··· MAX * Tape selectors ··· Normal position Equipment: * VTVM * AF oscillator * ATT	 Test equipment connection is shown in fig. 27. Supply 1 kHz signal (-24 dB) to the LINE IN jack, then press the record button. Adjust the ATT so that the output level at LINE OUT jack becomes 0.65 V (= standard input level). Adjustment at "0 dB": A Adjust VR501 (L-CH) and VR502 (R-CH) so that the Fluorescent meters show an illuminated indication up to "0 dB" when the input signal level is 0.9 dB higher than the standard input level. Fig. 28 		

ZOW	St

	MEASUREMENT & ADJUSTMENT		
	indication up to "-20 dB" when the	"when the input standard input level. (R-CH) so that the Fluorescent meters show an illuminated a input signal level is $15.1\mathrm{dB}$ lower than the standard input leneters show an illuminated indication up to " $-15\mathrm{dB}$ " when in the standard input level.	
Condition: * Record/playback mode * Input level control ··· MAX Equipment: * VTVM * AF oscillator * ATT * Test tape (reference blank tape) QZZCRA for Norma QZZCRY for Fe-Cr QZZCRZ for Metal		ne standard value, rease, refer to bias of the line, refer to bias of the line, refer to line, r	

Service Manual

Supplement.2

Direct-Drive Concise Cassette Deck with Metal Tape Recording Capability **RS-M02**

/Black Face Silver Face

DOLBY SYSTEM

Please use this manual together with the service manual for model No. RS-M02 (original) order No. ARD-7908072C and Supplement-1 order No. ARD-800606S.

This is the Service Manual for the following areas.

D For all European areas except United Kingdom.

B For United Kingdom.

N For Asia, Latin America,

Middle East and Africa areas.

A For Australia.

PARTS COMPARISON TABLE:

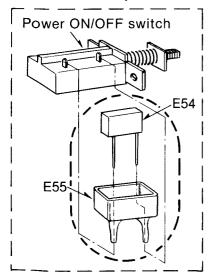
Please revise the original parts list in the Service Manual to conform to the changes shown herein.

If new parts number are shown, be sure to use them when ordering parts.

Important safety notice.
Components identified by \triangle mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

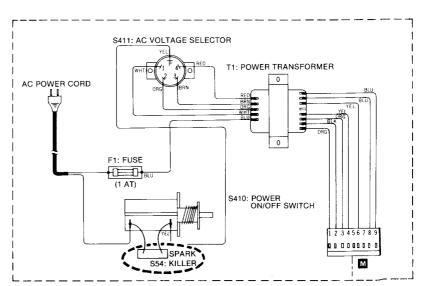
Parts Name & Description			Remarks
	Former Type	New Type	
nield Plate	QTS1451	QTS1491	
ariable Resistor	EWKNXAF22A54	EWJSEAF22A54	
nield Plate (for T1)	QTS1488	QTS1503	
park Killer		QCR008T	Added
atin America, Middle East and Afric	ca areas.		
park Killer Cover		QTW1118	Added
2	riable Resistor nield Plate (for T1) oark Killer .atin America, Middle East and Afri oark Killer Cover	riable Resistor EWKNXAF22A54 sield Plate (for T1) QTS1488 park Killer atin America, Middle East and Africa areas.	EWKNXAF22A54

ELECTRICAL PARTS LOCATION (ADDITION)



* For Asia, Latin America, Middle East and Africa areas.

WIRING CONNECTION DIAGRAM



* For Asia, Latin America, Middle East and Africa areas.

* 'Dolby' and the double-D symbol are trademarks of Dolby Laboratories.

Technics

RS-M02 RS-M02

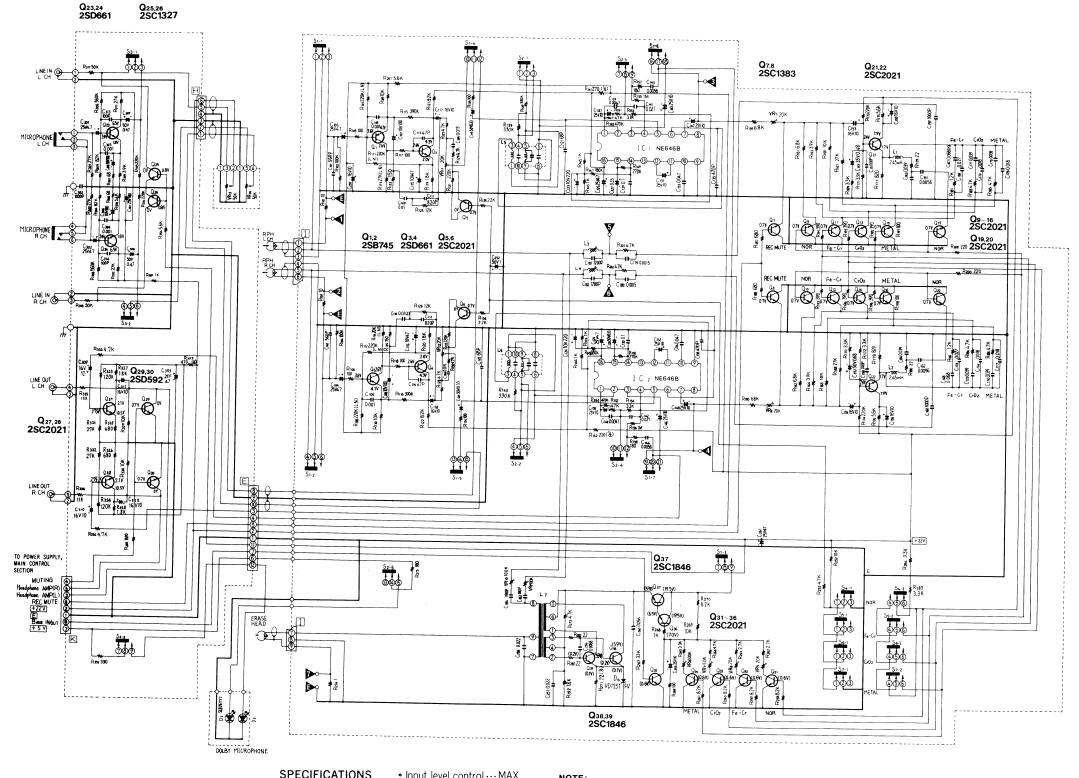
Dolby NR circuit Condition: 1. Place UNIT into record mode, set the Dolby NR switch to OUT position and supply to LINE IN to obtain -34.5 dB at TP3 (L-CH), TP4 (R-CH) (frequency 5 kHz).			
* Record mode * Input level control ··· MAX Equipment: * VTVM	obtain -34.5dB at TP3 (L-CH), TP4 (R-CH) (frequency 5 kHz). 2. Confirm that the value at IN position is $8(\pm 2.5)\text{dB}$ greater than the value at OUT position of Dolby		
Description adjustment 1. Loosen screws (D) shown in fig. 33. 2. Push the plurger all the way into the solenoid as shown in fig. 33. 3. More plurger angle (E) so that the record/pleyback select switch (S1) is completely shifted in the direction of arrow (H) as shown in fig. 33. 4. After adjustment, look screws (D) with lacquer. Fig. 33			

CABINET PARTS

Ref. No.	Part No.	Part Name & Description	
	CARIF	NET PARTS	-
G1	0YP0893	Front Panel Assembly	
	"Silver Type" QYP0893K	"	G4
	"Black Type"	D - L D - L - (1)	
G1-1	QGO1585 "Silver Type"	Push Button (A)	
	QG01585K	· · ·	
	"Black Type"	2 1 2 11 17	
G1-2	QGO1586 "Silver Type"	Push Button (B)	
	QGO1586K	n	
	"Black Type"		G14
G1-3	QGO1596 "Silver Type"	Push Button (Select Button)	
	QGO1596K	n	
	"Black Type"		G14
G1-4 G1-5	QBC1148 QG01594	Spring Push Button (Power ON/OFF)	
G1-3	"Silver Type"	rusii buttoii (rower UN/UFF)	G11
	QGO1594K	"	
01.6	"Black Type"	Coring	
G1-6 G1-7	QBC1187 QXB0642	Spring Push Button (Eject Button)	
	"Silver Type"		
	QXB0642K	"	
G1-8	"Black Type" QBC1188	Spring	
G1-8	XUC25FT	Stop Ring	
			G13
G2	QYT0540 "Silver Type"	Volume Knob (A)	G8 G8 G8 G15
	QYT0540K	n	G1-9 G1-6 G1-5
	"Black Type"		GI B T
G3	QYT0541	Volume Knob (B)	G1-8
	"Silver Type" QYT0541K	,,	G13
	"Black Type"		
G4	QGC1145	Case Cover	G1-2 C1-2
	"Silver Type" QGC1145K	"	G1-7 G13
	"Black Type"		1 61/2
G5	QGK2967	Cassette Lid	G1-4
	"Silver Type"		G18 G1-1
	QGK2967K	ll ll	G1-1
G6	"Black Type" QHQ1291	Cassette Lid Holding Screw	
-	"Silver Type"		G5 G13 G G9
	QHQ1291K	n .	
G7	"Black Type" QBG1551	Cushion Rubber	G18 G13
G8	QGB1962	Switch Cover	G3 G3
	"Silver Type"	n	
	QGB1962K "Black Type"	"	G2 G2
G9	QKJ0360	Meter Cover (A)	
	"Silver Type"		G7 G7
	QKJ0360K "Black Type"	n .	G6
G10	QGL1140	Meter Cover (B)	
G11	QGC1172	Rear Board	
	"Silver Type" QGC1172K	"	GI
	"Black Type"		
			G14
G12 DBA	QYB0395	Bottom Cover Assembly	
	ropean areas and A		
N	QGC1148	" 	
∗For Asia, G12-1	Latin America, Midd QKA1080	le East and Africa areas.	
313	XTS3+8BFN	Screw ⊕3×8	
G14	XTB3+8JBX	Screw ⊕3×8	
	"Silver Type" XTB3+8JFX	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ref. No. Part Name & Description
	"Black Type"	"	Ref. No. Part No. Part Name & Description
15	XTB3+8JFX	Screw ⊕3×8	A3 📵 QJP0603S AC Plug Adaptor
S16 D	QGS2716	Main Name Plate	#For Asia, Latin America, Middle East and Africa areas. A4 □ Q QT2675 Instruction Book
	ropean areas except QGS2717	United Kingdom.	A4 D QQT2675 Instruction Book For All European areas except United Kingdom.
For Unite	d Kingdom and Aust		□ □ □ QQT2674
	QGS2718	la Cash and Africa array	#For United Kingdom and Australia.
∉For Asia, G17	Latin America, Middl QGR0108	le East and Africa areas.	
G18	XSN26+4	Screw 2.6×4	
			PACKINGS
	ACCE	SSORIES	P1
A1	RP023A	Connection Cord	P3
A2	QFTC30S011TZ	Demonstration Tape	P4 XZB36X46A02 Poly Bag

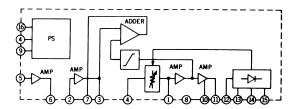
12

SCHEMATIC DIAGRAM MAIN AMP SECTION



● VR9--



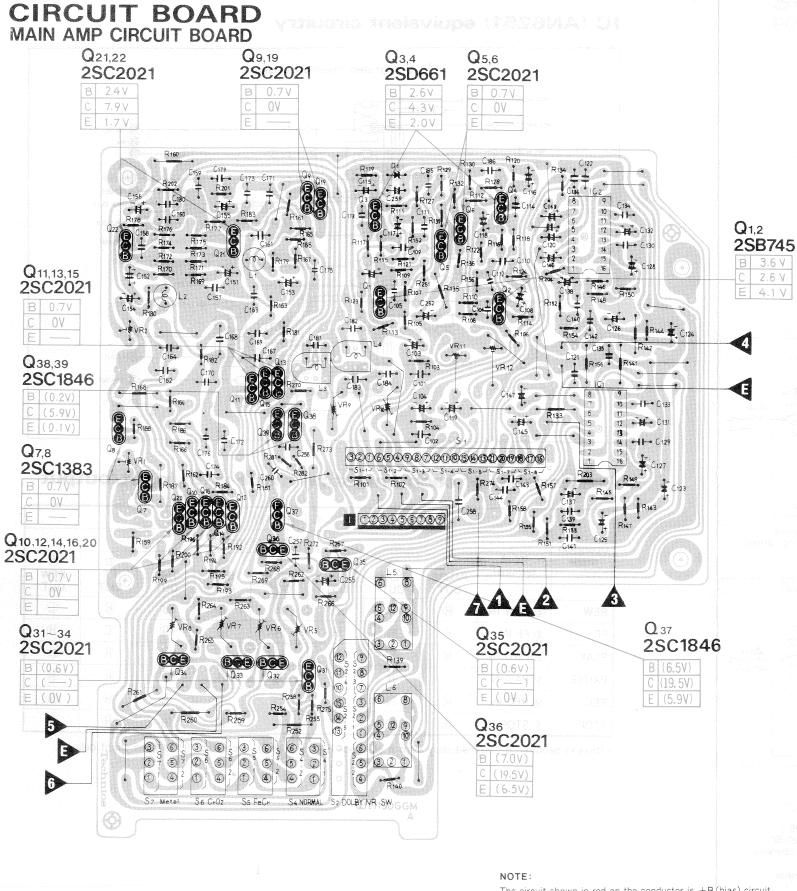


* Input level control ··· MAX		
Playback S/N ratio Test tape ··· QZZCFM	More than 47 dB	
Overall distortion Test tape QZZCRA for Normal QZZCRX for CrO ₂ QZZCRY for Fe-Cr QZZCRZ for Metal	Less than 3.5%	
Overall S/N ratio Test tape ··· QZZCRA	More than 45 dB (without NAB filter)	

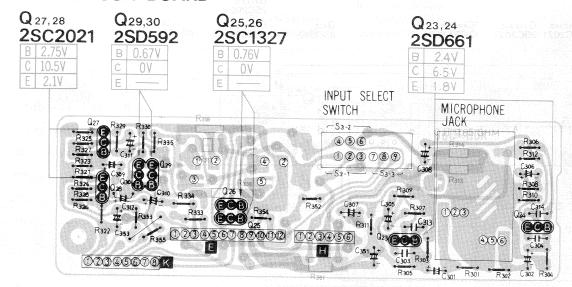
NOTE:
• S1-1~S1-7 ····· Record/playback select switch (shown in playback position
• S2-1~S2-5 ····· Dolby IN/OUT select switch (shown in OUT position).
• S3-1~S3-3 ······ Input MIC/LINE select switch (shown in LINE position).
• S4-1, S4-2····· Tape select switch (for Normal tape).
• S5-1, S5-2····· Tape select switch (for Fe-Cr tape).
• S6-1, S6-2····· Tape select switch (for CrO2 tape).
• S7-1, S7-2····· Tape select switch (for Metal tape).
VR1, 2 ····· Recording current adjustment VR.
 VR5 Bias current adjustment VR (for Normal tape).
 VR6 ····· Bias current adjustment VR (for Fe-Cr tape).
 VR7 Bias current adjustment VR (for CrO₂ tape).
VR8 ····· Erase current adjustment VR (for Metal tape).

Bias current adjustment VR (for Metal tape).

- VR10 ·· Bias current adjustment VR (for Normal tape). • VR11, 12... · Playback gain adjustment VR.
- VR13, 14 ·· Input level control.
- L3, 4······ · Bias trap coil.
- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise. K = 1,000 Ω .
- $\kappa = 1.0002$. Capacity are in microfarads (μF) unlass specified otherwise. P = Pico-farads.
- All voltage values shown in circuitry are under no signal condition and record mode with volume control at minimum position.
- For measurement, use VTVM.
- The voltage enclose () indicates are measured during record mode.
 The mark (▼) shows test point. e.g. ▼ = Test point 1.



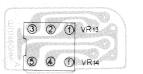
JACK CIRCUIT BOARD



LED CIRCUIT BOARD



INPUT LEVEL CONTROL CIRCUIT BOARD



TE: RESISTORS	CAPACITORS
ERD · · · Carbon	ECG Ceramic
ERG ··· Metal-oxide	ECK - Ceramic
ERO Metal-film	ECC □ ····· Ceramic
ERX · · · Metal-film	ECF Ceramic
ERQ · · · Fuse type metallic	ECQM Polyester film
ERC · · Solid	ECQE Polyester film
ERF Cement	ECQF Polypropylene
	ECE□ ···· Electrolytic
	ECE N ··· Non polar electrolytic
	ECQS Polystyrene

NOTE: ∆ indicates that only parts specified by the manufacturer be used for safety.

Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.
DE	SISTORS	R147, 148		R201, 202	G 100 100 100
	01010110		ERD25TJ184		ERD25FJ472
R101, 102		R149, 150		R203, 204	
	ERD25FJ100		ERD25TJ274		ERD25TJ474
R103, 104		R151, 152		R251	ERD25FJ562
	ERD25TJ104		ERD25TJ473	R252	ERD25FJ103
R105, 106		R153, 154		R254	ERD25FJ332
	ERD25FJ101	1.100, 10	ERD25FJ332		
R107, 108		R155	ERD25TJ105	R255	ERD25FJ472
	ERD25TJ224	R156	ERD25TJ105	R258, 259,	260, 261
R109. 110		R157, 158		10.	ERD25FJ822
	ERD25FJ103	1,137, 136	ERD25FJ181	R262, 263,	
R111, 112	10.555	R159	ERD25FJ181		ERD25FJ272
	ERD25TJ224			R265	ERD25FJ332
R113, 114	21.02010224	R160	ERD25FJ682	R266	ERD25FJ101
110, 144	ERD25TJ273	R161, 162		R267	ERD25TJ333
	LND2J1J2/J	la sila sila	ERD25FJ682	R268	ERD25FJ102
R115, 116				R269	
	ERD25TJ394	R163, 164			ERD25FJ103
R117, 118			ERD25FJ392	R271	ERD50FJ120
	ERD25FJ101	D105 100		R272	ERD25FJ182
R119, 120		R165, 166		2072	FDD0551130
	ERD25FJ182		ERD25FJ103	R273	ERD25FJ472
	ENDEDISIOE	R167	ERD25TJ273	R274	ERD25FJ1R0
		R168	ERD25TJ273	R275	ERD25FJ181
R121, 122		R169, 170		R281, 282	LND23/3101
	ERD25FJ822		ERD25FJ332	11201, 202	ERD25FJ220
R123, 124		R171, 172		R285	ERD25FJ220
	ERD25FJ151		ERD25TJ333	R301, 302	ERDZ5FJ33Z
R125, 126		R173, 174		R301, 302	CDDOCTIONS
	ERD25TJ123		ERD25TJ224	D200 00:	ERD25TJ273
R127, 128,	129, 130	R175, 176		R303, 304	12232
\$45 K	ERD25FJ472	BALS	ERD25FJ562		ERD25TJ823
R131, 132		R177, 178	1000	R305, 306	
	ERD25TJ224		ERD25FJ821		ERD25TJ564
R133, 134	profession in the s	R179, 180	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R307, 308	
	ERD25FJ101		ERD25FJ220		ERD25FJ680
R135, 136				R309, 310	
1100, 100	ERD25FJ222	R181, 182			ERD25FJ392
2120 140	LINDZJIJZZZ		ERD25FJ122		
R139, 140	EDDOETION	R183, 184,	185, 186	R311, 312	
0141-140	ERD25TJ334		ERD25FJ472		ERD25TJ273
R141, 142	EDDEGE	R187, 188		R321, 322	
	ERD50FJ271	10000	ERD25FJ681		ERD25TJ273
R143, 144,	145, 146	R191, 192.	193, 194, 195, 196	R323 324	LIIDZJ132/3
	ERD25FJ102		ERD25FJ391	11020, 024	ERD25TJ124
		R199, 200			LUNCOINTS4

The circuit shown in red on the conductor is +B (bias) circuit.

Values indicated in _____ are DC voltages between the chassis and electrical parts.

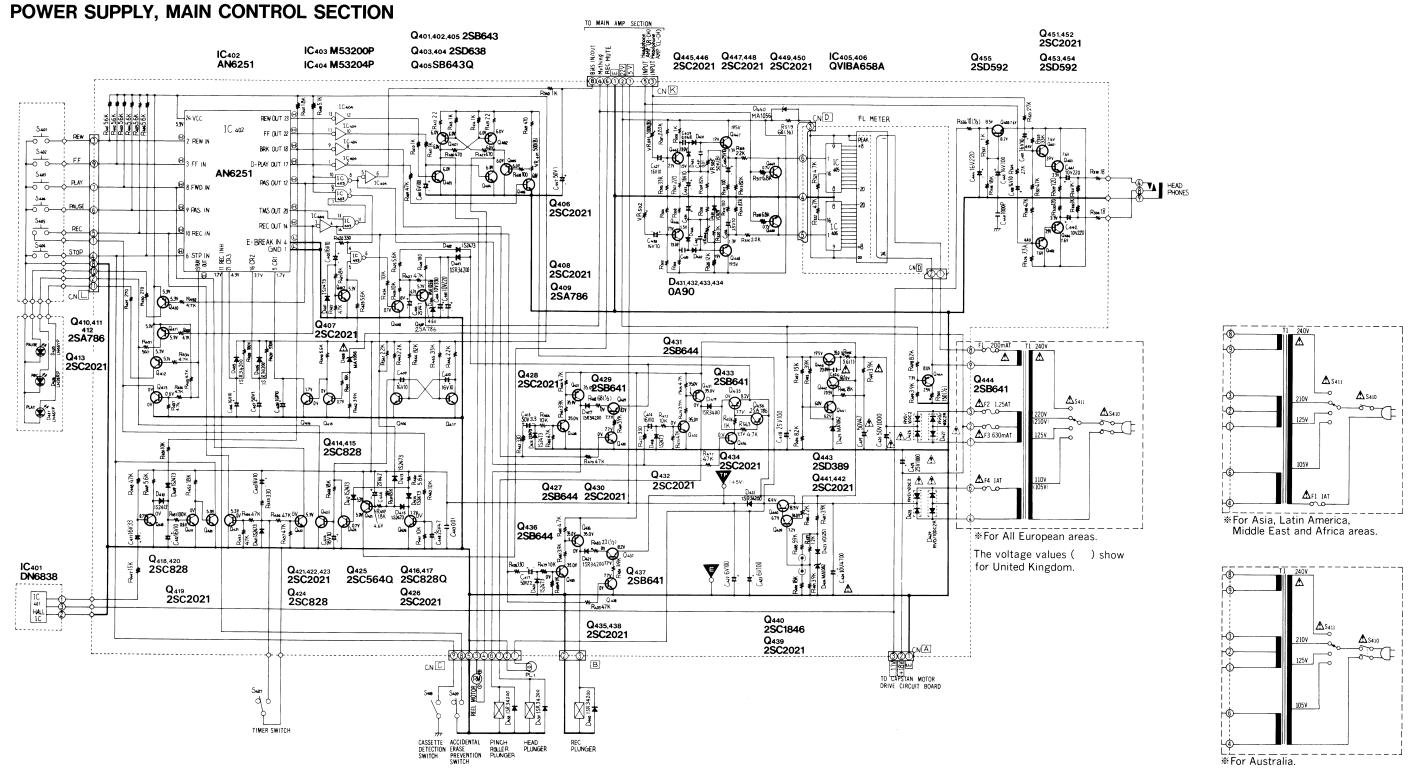
The voltage enclose () indicates are measured during record mode.

Def. No.	D: -1 N	Det	D 1:	1		Dof 1	P
Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.
R325, 326	ERD25FJ681	R536	500101111	C105, 106	LOCKEDIONIN	C402 C403	ECEA1HS100
R327, 328	ERD23/3001	®For All Fu	ERQ12HJ180 ropean areas.	C107, 108	ECFWD102KVY	C404 :	ECEA25N4R7 ECEA1AS331
	ERD25FJ182	NA.	ERG12ANJ180P		ECEA10M100	C405	ECEA1AS221
R329, 330	ERD25FJ103		Latin America,	C109, 110	ECOM11110217	C406 C407	ECEA1HS100 ECEA2AS010
R333, 334	ENDEST 3100	and Austr	st, Africa areas alia.	C111, 112	ECQM1H103JZ	C408, 409,	
	ERD25FJ472		1		ECKD1H821K		ECEA1HS100
R335 R352	ERD25FJ152 ERD25FJ331		XBAQ125028	C113, 114	ECCD1H470K	C411 C412, 413.	ECEA1CS330
R353	ERD50FJ471		ropean areas. XBAQ0008	C115	ECSF10E47	0412, 413,	ECEA1HS100
D254	EDDOECIECO	∗ For All Eu	ropean areas.	C116	ECEA1AS470	C415 C416	ECEA2AS3R3
R354 R355	ERD25FJ562 ERD25FJ821		XBAQ100027 ropean areas.	C117, 118	ECEA1HS100	C416	ECEA1HS100 ECEA2AS2R2
R405	ERD25FJ562	R496	ERD25TJ183	C119, 120	Localinoso	C418	ECEA1ES101
R409 R412	ERD25TJ473 ERD25FJ2R2		ERD25FJ392	0101 100	ECEA50MR33	C419 A	1
R415	ERD25FJ2R2	R498	ERD25FJ103	C121, 122	ECCD1H680K	C422, 423	COLATIISTOZ
R416, 417		R499	ERD25FJ392	C123, 124	,		ECEA1AS101
R418	ERD25FJ471 ERD25FJ101	R500 R501, 502	ERD50FJ151	C125, 126	ECEA1AS221	C424 C425	ECEA1AS472
R419	ERD25FJ471	K301, 302	ERD25TJ224	0123, 120	ECEA1ES470		ECEA1VS102 ECFWD104MXY
R420	ERD25FJ331	R503, 504		C127, 128		C427, 428	1
R421	ERD25TJ183	DE05 505	ERD25TJ333	0100 100	ECEA50MR33		ECEA1HS100
R422	ERD25TJ473	R505, 506	ERD25FJ102	C129, 130	ECFWD104MXY	C429, 430	
R423	ERD25FJ562	R507, 508		C131, 132		C431, 432	ECFDD683MXY
R424 R425	ERD25FJ103 ERD25FJ562	R509, 510	ERD50FJ221	C133, 134	ECEA1HS100		ECFWD103KVY
R426	ERD25FJ103	1,309, 310	ERD25TJ823	0133, 134	ECQM1H473JZ	C433, 434	ECEA1HS100
R427 : R428 !	ERD25FJ472	R511, 512		C135, 136	-	C435, 436	E0E01113100
R428 R429, 430	ERD25FJ101	R513, 514	ERD25FJ101	C137, 138	ECKD1H471K		ECEA1HS100
	ERD25FJ271		ERD25TJ823		ECEA1HS100	C437, 438	ECEA1HS100
R431	ERD25FJ561	R515, 516	CDDOCCIOOO	C139, 140	ECOM1UATO IT	C441, 442	
R432, 433,	434, 435	R519	ERD25FJ222 ERD50FJ680	C141, 142	ECQM1H472JZ	C443	ECEATAS221
	ERD25FJ472	R520	ERD25FJ102		ECQM1H273JZ	C443 C444	ECFDD103KVY ECEA1CS221
R436, 437	ERD25TJ473	R521, 522	EDDOEEM72	C143, 144	ECOM14EC017	C445	ECEA1ES101
R438	ERD25TJ184	R523, 524	ERD25FJ472	C145, 146,	ECQM1H562JZ 147, 148	C446 :	ECEA25N4R7 ECEA1HS010
R439 :	ERD25TJ334 ERD25FJ562		ERD25TJ273		ECEA1HS100	C448	ECEA1ES4R7
R441	ERD257J183	R525, 526	ERD25TJ333	C149, 150	ECKD1H102KB	C449, 450,	
R442 :	ERD25FJ392	R528	ERD25TJ473	C151	ECSF35ER68	C601	ECFDD103KVY ECEA50M1R
R443 R444	ERD25FJ222 ERD25TJ823	R529, 530	EDDOSELLO	C152	ECEA50ZR68	C602, 603	
	ERD25TJ333	R533, 534	ERD25FJ121	C153, 154	ECEA1HS100	C604	ECKD1H102MD
R446	EDDOECIOOO	1	ERD25FJ180	C155	ECSF16E10	C605	ECQM1H392KZ
R446	ERD25FJ222 ERD25TJ153	R536 R537	ERD50FJ180 ERD25FJ102	C156 C157, 158	ECEA1HS100	C606	ECQM1H473KZ
R449	ERD25FJ562	R539	ERD25TJ183	0157, 150	ECCD1H101K	C607 C608	ECEA50ZR33 ECQM1H273KZ
R450 R451	ERD25FJ103 ERD25TJ104	R540	ERD25FJ102	C159, 160	FORDILIAGED	C609	ECEA50ZR68
R452	ERD25TJ183	R541 R543	ERD25FJ222 ERD25FJ472	C161, 162	ECKD1H102KB	C610 : C611, 612	ECSF35ER47
R453, 454	ERD25TJ473	R602	ERD25FJ221		ECQM1H562KZ	0011, 012	ECEA25N4R7
R455	ERD251J473 ERD25FJ331	R603 R604	ERD25TJ104 ERO25CKF12Q3	C163, 164	ECQM1H393KZ	C613 C614	ECSF25E10
R456, 457	50005T1430	R605	ERD25FJ332	C167, 168	Coquitiosonia	C615	ECSF25E1Z ECQM1H153KZ
R458, 459	ERD25TJ473	R606	ERD25FJ103	C169, 170	ECQM1H683KZ	C616	ECSF10E3R3
	ERD25TJ183	R607 R608, 609	ERD25FJ822	0103, 170	ECQM1H273KZ	C617	ECQS1682JZ
R460	ERD25FJ562		ERD25FJ270	C171, 172	F00M111202K7		NSISTORS
R461, 462	ENDES/300E	R610, 611,	612, 613 ERD25FJ471	C173, 174	ECQM1H393KZ	Q1, 2 Q3, 4	2SB745 2SD661
DAE4	ERD25FJ103	R614, 615,	616, 617	i i	ECQM1H223KZ	Q5, 6	2SC2021
R464 R465	ERD25FJ103 ERD25TJ473	R618	ERD25FJ103	C175, 176	ECQM1H393KZ	Q7, 8	2SC1383
R466	ERD25FJ472	R619	ERX12ANJ1R0 ERD25FJ150	C179, 180		Q9, 10, 11, 1	.2, 13, 14, 15, 16 2SC2021
R467 R472	ERD25FJ392 ERD25FJ103	R620	ERD25FJ391	J	ECQM1H152KZ	Q19, 20, 21,	22
R473	ERD25TJ473	R621	ERD25FJ680	C181, 182	F000:	022 24	2SC2021
R474	ERD25FJ472	R622 R623	ERD25FJ391 ERD25TJ123	C183, 184	ECQS1122JZ	Q23, 24 Q25, 26	2SD661 2SC1327
R475	ERD25FJ392	R624	ERD25FJ682		ECCD1H181K	Q27, 28	2SC2021
R476 R477	ERD25FJ102 ERD25TJ473	VARIABI	L E	C185, 186	COM1H1C2V7	Q29, 30 Q31, 32, 33,	2SD592NCS 34 35 36
R478	ERD25FJ331		RESISTORS	C252	ECQM1H153KZ ECEA1HS100	V21, 32, 33,	2SC2021
R481 R482	ERD25FJ472	VR1, 2	EVNKOAAOOB24	C255	ECEA1HS100	Q37, 38, 39	
R482 R483	ERD25FJ392 ERD50FJ220	VR5, 6 VR7	EVNK4AA00B24 EVNK4AA00B54	C256 C257	ECQM1H682KZ ECQM1H223KZ	Q401, 402	2SC1846
R484	ERD25FJ392	VR8, 9, 10		C258	ECQF4223KZ		2SB643Q
R485 R486	ERD25TJ183 ERD25FJ222	VR11, 12	EVNK4AA00B15 EVNK4AA00B24	C259	ECSF16E10	Q403, 404	2506200
R487, 488		VR11, 12 VR13, 14	EWKNXAF22A54	C260 C261	ECFWD563KXY ECEA1ES470	Q405	2SD638Q 2SB643Q
-	ERD25FJ392	VR401	EVNKOAA00B52	C301, 302		Q406, 407, 4	408
R489	ERD25TJ122	VR501, 502	EVNKOAAOOB15	C303, 304	ECEA25M4R7	Q409, 410, 4	, 2\$C2021 411, 4 12
R490	ERD25TJ183	VR503, 504		0303, 304	ECFWD102KVY	2.00, 410,	2SA786
R491 R492	ERD25FJ392 ERD25TJ153	VP601	EVNKOAAOOB54	C305, 306		Q413, 414	2002021
R493	ERD25FJ392	VR601	ÉVNKOAA00B14	C307, 308	ECEA1AS101	Q415, 416,	2SC2021 417, 418
R494	ERD25FJ822		ACITORS	3007, 300	ECEA50MR22		2SC828
R495	ERQ12HJ5R6	C101, 102	FORDINEET	C309, 310, 3		Q419 Q420	2SC2021 2SC828
∗For All Euro	pean areas.	C103, 104	ECKD1H561K	C313, 314	ECEA1HS100	Q420 Q421, 422, 4	
MA	ERX1ANJ5R6H		ECEA25M4R7R		ECCD1H101KC		2SC2021
	atin America, t, Africa areas			C351 C353	ECEA1ES101 ECEA1ES470	Q424 Q425	2SC828 2SA564
and Austral				C401	ECEAUS101	Q426	2SC2021
						Q427	2SB644

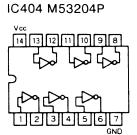
Ref. No.	Part No.	Ref. No.	Part No.					
Q428	25C2021		DIODES					
Q429	2SB641R	i	DIODES					
Q430	2SC2021		l f					
Q431	2SB644	D2	SLB26YY1					
Q432	2SB2021	D3	SLB26GG1					
Q433	2SB641R	D4	VD1251					
Q434, 435	i	D401, 4	1					
į	2SC2021		152473					
Q436	2SB644	D403	SM112					
Q437	2SB641R	D404	MA1056					
Q438, 439	+	D405, 4						
	2SB2021		SM112					
Q440	2SC1846	D408	MA1056					
Q441	2SC2021	D409, 4						
Q443	2SD389	1	1\$2473					
0444	2SB641R	D412, 4	13, 414, 415, 416					
0445, 446			1\$2473					
¥ 140, 440	2SC2021	D417	SM112					
0447 448	3, 449, 450	D418	1\$2473					
Q 447, 440	2SC2021	D419	SM112					
0451, 452		D420	182473					
Q+31, +32	2SC2021	D421	SM112					
Q453, 454		D422	SM112					
Q+33, 434	2SD592NCS	D423	VD1251					
0456	2SA786	D424	MA1082					
	, 603, 604	D425	MA1062					
2302, 302	2SB6430	D426	A RVD10DC2					
0605	2SA885	D427	△ RVD10DC2R					
£ 300	_0,,000	D428	△ RVD10DC2					
INTEGR	ATED	D429	A RVD10DC2R					
	CIRCUIT		VD1251					
IC1. 2	NE646B	D431, 43	32, 433, 434					
IC401	DN6838		0A90					
IC402	AN6251	D435	LN46YP					
IC403	M53200P	D436	:LN26RP					
IC404	M53204P	D437	LN46YP					
IC405, 406		D438, 43	39					
Ī	OVIBA658	1	SM112					
IC601	AN6633	D440	MA1056					
Ref. N	o. Part N	0.	Part Name & Descripti					

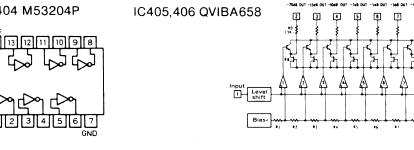
Ref. No.	Part No.	Part Name & Description
	TRANS	FORMER
	QLPD40ELC	Power Transformer
∗ For All Eu	ropean areas except	United Kingdom.
	QLPZ15ELC	H .
		in America, Middle East, Africa
areas and	Australia.	
	C	OILS
L1, 2	QLQX2421Y	Peaking Coil
L3, 4	QLQM0333	Bias Trap Coil
L5, 6	QLM9Z7	MPX Filter Coil
L7	QLB0193K	Bias Oscillation Coil
	PILO	 T LAMP
PL1	i	Pilot Lamp
	,	
		<u>JSES</u>
	XBAQ0013	Fuse (200 mAT)
	ropean areas.	
		Fuse (1AT)
	Latin America, Middle	
		Fuse (500 mAT)
	ropean areas. XBAQ0006	Euro (315 AT)
	ropean areas.	Fuse (315 mAT)
		Fuse (630mAT)
	ropean areas.	Tuse (USUMAT)
Ī	ľ	l or o
		ACKS
J1	QEJ5024S	Jack Board
J2	QJA0444H	Microphone Jack
13	QJA0247	Headphones Jack
	swi	TCHES
S1	QSS7203	Slide Switch (Record/Playback)
S2	OSWZ501A	Push Switch (Dolby IN/OUT)
S3	0SS4207T	Slide Switch (Input Selector)
S4, 5, 6, 7	1.	
	QSWZ501A	Push Switch (Tape Selector)
S401, 402,	403, 404, 405, 406	·
	QSW1111H	Control Key Switch
S407	QSS1102T	Slide Switch
	"Silver Type"	
	QS\$1104T	n n
	"Black Type"	l
\$408	QSB0238	!eaf Switch (Cassette
	00110053	Detection Switch)
S409	QSM0067	Micro Switch (Accidental Erase
6410		Prevention Switch)
S410	00000144	Power Switch
	QSW2214A	
	ropean areas and Au	stralia. Power Switch
		East and Africa areas.
		AC Power Voltage Select Switch
5711	4011740/II	Ones Tottage Select Smitch

SCHEMATIC DIAGRAM



IC403 M53200P





Rewind button switch.
Fast forward button switch
····· Playback button switch.
····· Pause button switch.
····· Record button switch.
····· Stop button switch.
·····Timer switch.
Cassette detection switch.

• S409 · ···· Erase safety switch. • S410 ···· Power ON/OFF switch.

• VR401 ····· Takeup torque adjustment VR.

- VR501, VR502 ······ FL meter adjustment VR (for "0dB").
- VR503, VR504 ······ FL meter adjustment VR (for "-20dB").
- Resistance are in ohms (Ω) , 1/4 watt unless specified otherwise. $K = 1,000 \Omega$.
- Capacity are in microfarads (µF) unless specified otherwise. P = Pico-farads.
- All voltage values shown in circuitry are under no signal condition and record mode with volume control at minimum position. For measurement, use VTVM.
- ullet indicates that only parts specified by the manufacturer be used for safety.

IC (

Rela

Operat mod

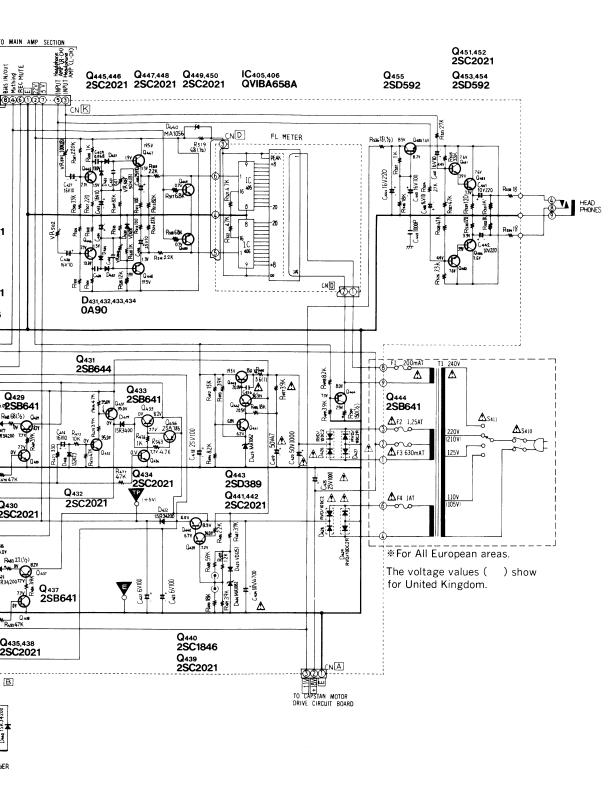
> REW FF

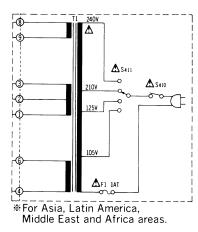
PLAY PAUSI REC

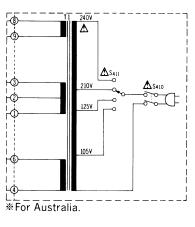
STOP * Doesr

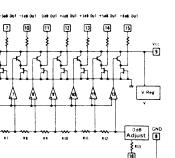
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RS-M02









NOTE: • S401 Rewind button switch. • S402 Fast forward button switch. • S403 Playback button switch. • S404 Pause button switch. • S405 Record button switch. • S406 Stop button switch. • S407 Timer switch. • S408 Cassette detection switch. • S409 Erase safety switch. Power ON/OFF switch.

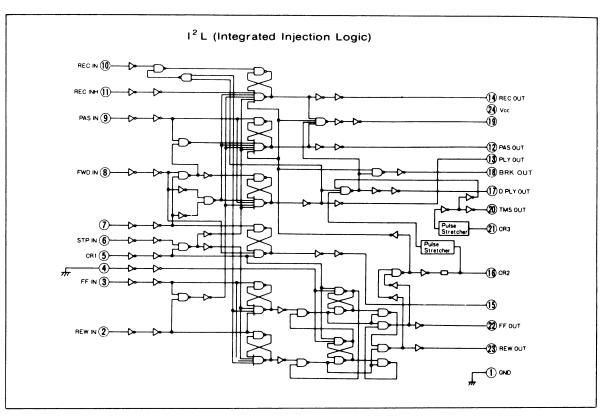
· Takeup torque adjustment VR.

• S410

• VR401

- VR501, VR502 ······ FL meter adjustment VR (for "0dB").
 VR503, VR504 ····· FL meter adjustment VR (for "-20dB").
- \bullet Resistance are in ohms (Ω), 1/4 watt unless specified otherwise. $K = 1,000 \Omega$.
- ullet Capacity are in microfarads (μF) unless specified otherwise. P = Pico-farads.
- All voltage values shown in circuitry are under no signal condition and record mode with volume control at minimum position. For measurement, use VTVM.
- ullet indicates that only parts specified by the manufacturer be used

IC (AN6251) equivalent circuitry



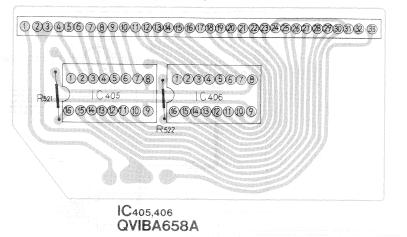
Relationship of each operation mode with input/output

	IC (AN6251)										
Operation		Output terminal									
mode	Input terminal	12 PAUSE OUT	13 PLAY OUT	(4) REC OUT	D-PLAY OUT	18 BRK OUT	20 TMS OUT	22 FF OUT	23 REW OUT		
REW	② REW IN	Θ	Θ	Θ	Θ	(L)	\oplus	Θ	(L)		
FF	3 FF IN	\oplus	Θ	\oplus	Θ	©	Θ	©	\oplus		
PLAY	® FWD IN	Θ	©	\oplus	© *	Û	\oplus	Θ	\oplus		
PAUSE	9 PAS IN	©	H	Θ	Θ	Θ	Θ	\oplus	H		
REC	10 REC IN	· • • • • • • • • • • • • • • • • • • •	Θ	(L)	H	Θ	Θ	Θ	Θ		
STOP	6 STOP IN	Θ	Θ	$^{\oplus}$	Θ	\oplus	Θ	Θ	Θ		

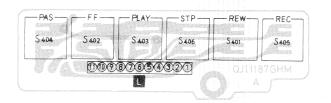
* Doesn't become " \mathbb{C} " immediately even if playback button pushed; becoming " \mathbb{C} " after a slight delay.

POWER SUPPLY, MAIN CONTROL CIRCUIT BOARD Q421 Q445.Q446 IC402 2SC828Q 2SC2021 2SC2021 AN6251 Q 410,411 2SA786 Q415 Q413 Q447,448 Q422 Q449,450 E 5.3V 2SC2021 2SC2021 2SC2021 2SC2021 2SC2021 **Q**444 Q414 2SB641 2SC2021 E OV B 0 V C 1.65V E 0V E 8.0V Q407 Q 412 2SC2021 2SA786 Q451,452 600 2SC2021 C 7.6 V E 3.9 V Q409_ Q408 2SA786 2SC2021 Q453,454 Q455 Q423 2SD592 2SD592 2SC2021 Q419 Q418 2SC2021 2SC2021 B 0.62V 87654320 Q430 Q420 2SC2021 2SC2021 C 5.3V E 0V Q434 Q428 2SC2021 2SC2021 Q425 Q₄₄₀ 2SC1846 Q439 Q443 **Q**442 Q441 2SD389 2SA786 2SC2021 2SC2021 2SC2021 Q406 Q429 2SC2021 2SB641 Q426 Q424 E 8.2V 2SC2021 2SC2021 Q405 **Q**433 Q404 Q402 Q403 Q438 Q435 2SB643 2SD638 2SB641 2SB643 2SD638 2SC2021 2SC2021 C 6.0 V E 0 V C 6.0V E 0V C 7.7 V E 0V E 6.0V E 8.2V Q427 Q431 Q 401 Q437 Q436 Q432 2SB644 2SB644 2SB643 2SC2021 2SB641 2SB644 B 35.0V B 35.0V C 6.0V E 6.0V E 8.2V E 35.0V

FL METER CIRCUIT BOARD



CONTROL KEY SWITCH CIRCUIT BOARD



LED CIRCUIT BOARD



HALL IC CIRCUIT BOARD



NOTE

The circuit shown in red on the conductor is $\pm B$ (bias) circuit. Values indicated in $\boxed{}$ are DC voltage between the chassis and electrical parts.

SCHI CAPSTA





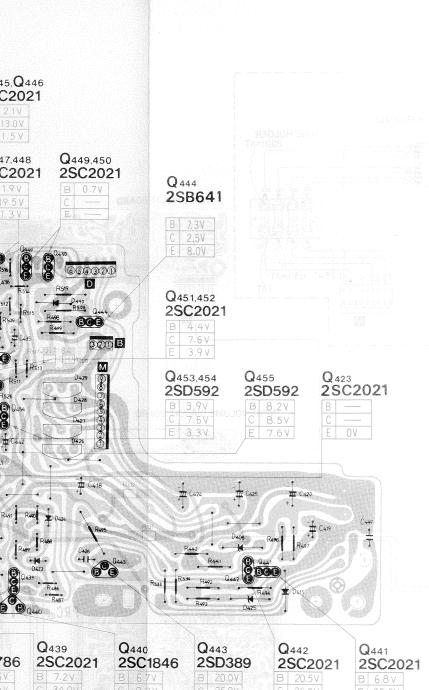


● VR601.

 Resistance are K = 1,000 Ω.

Capacity are i
 P = Pico-farad

All voltage value and record mo
 For measurement



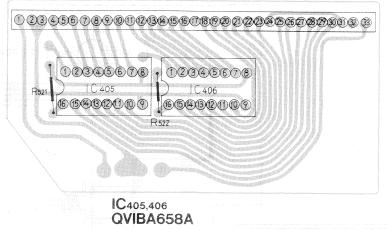
Q424

2SC2021

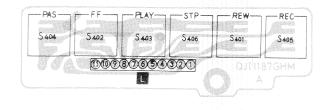
SC2021

Q₄₃₂ SC2021





CONTROL KEY SWITCH CIRCUIT BOARD



LED CIRCUIT BOARD



HALL IC CIRCUIT BOARD



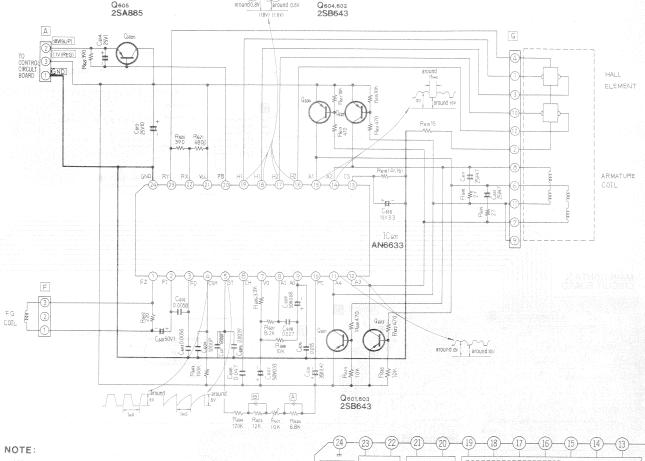
NOTE

The circuit shown in red on the conductor is +B (bias) circuit.

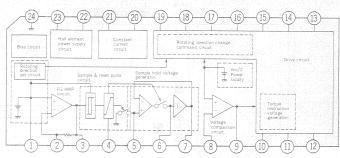
Values indicated in _____ are DC voltage between the chassis and electrical parts.

SCHEMATIC DIAGRAM

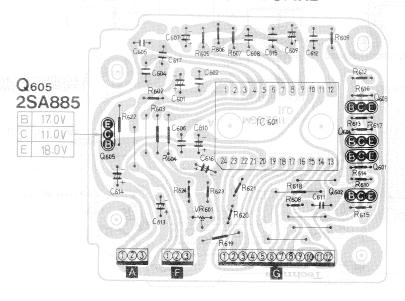
CAPSTAN MOTOR SECTION



- 1..... Tape speed adjustment VR.
- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise. K = 1,000 Ω .
- All voltage values shown in circuitry are under no signal condition and record mode with volume control at minimum position.
 For measurement, use VTVM.



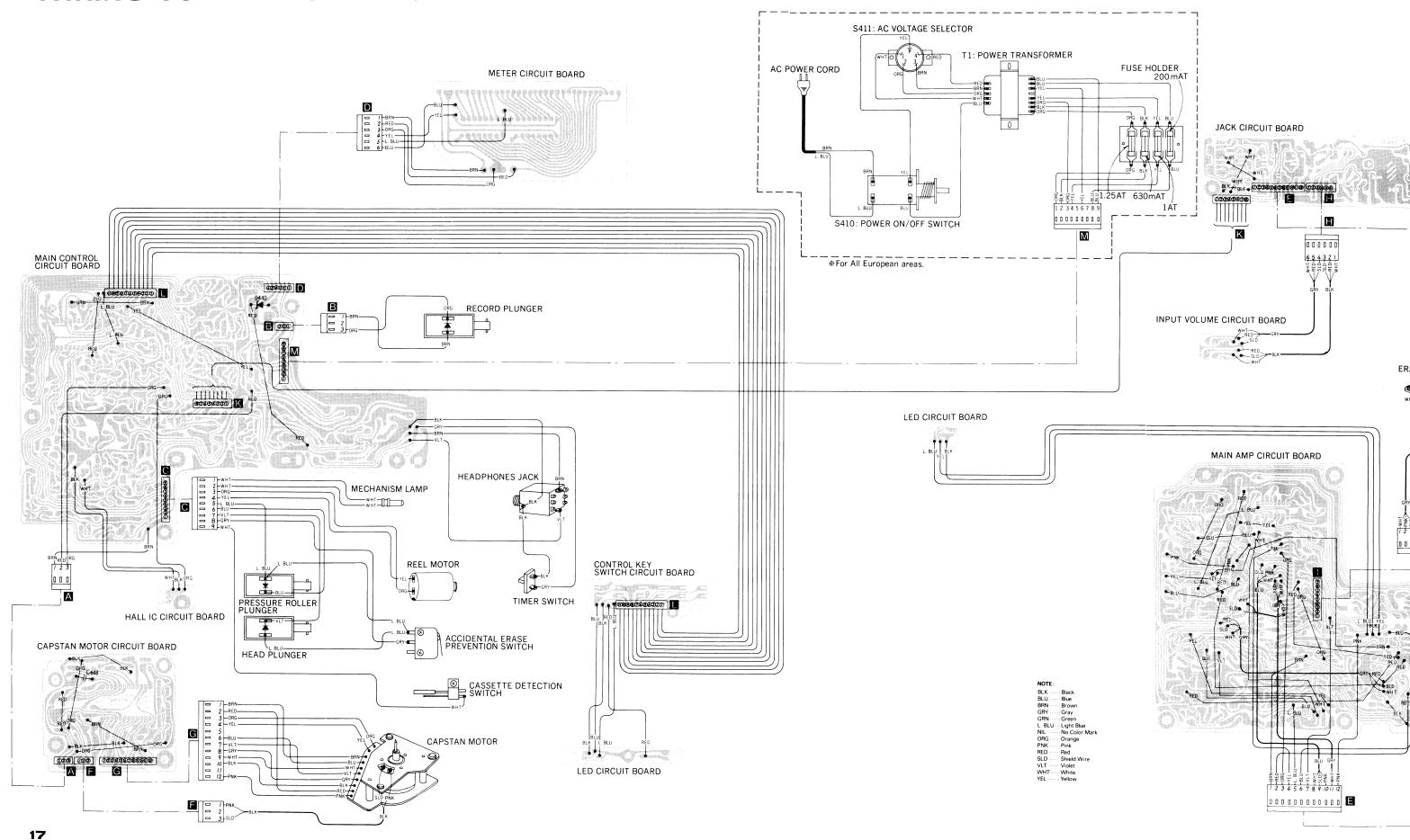
CAPSTAN MOTOR CIRCUIT BOARD

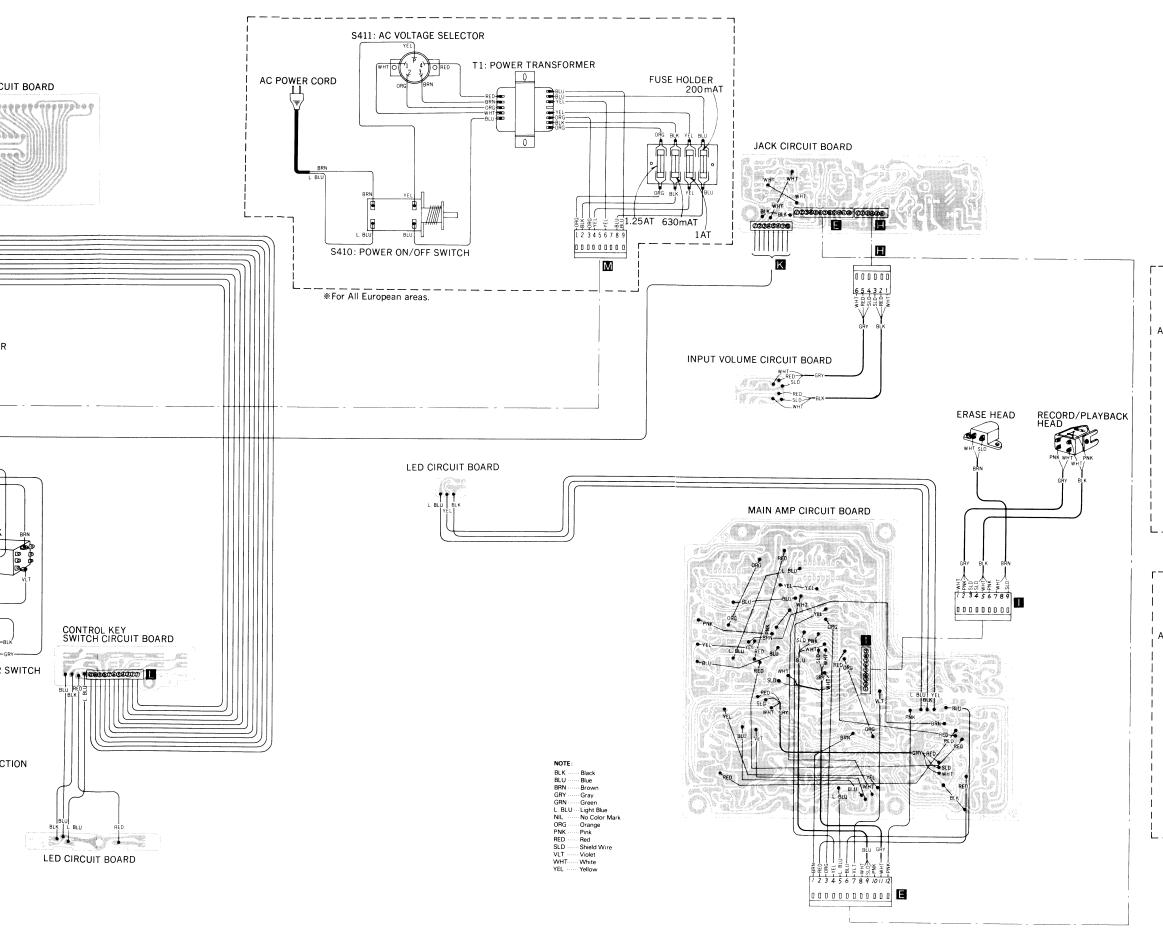


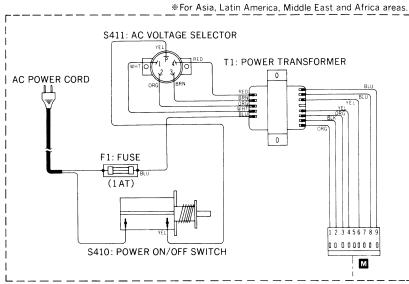
RS-M02

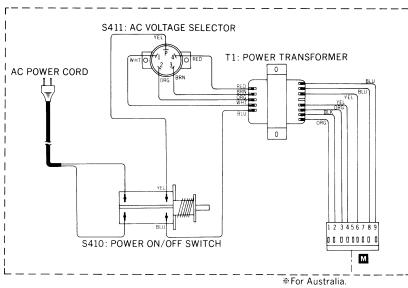
WIRING CONNECTION DIAGRAM

RS-M02

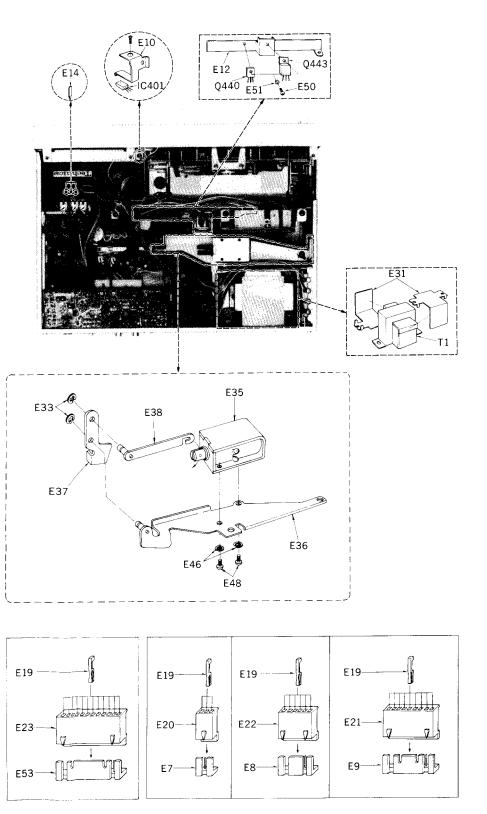


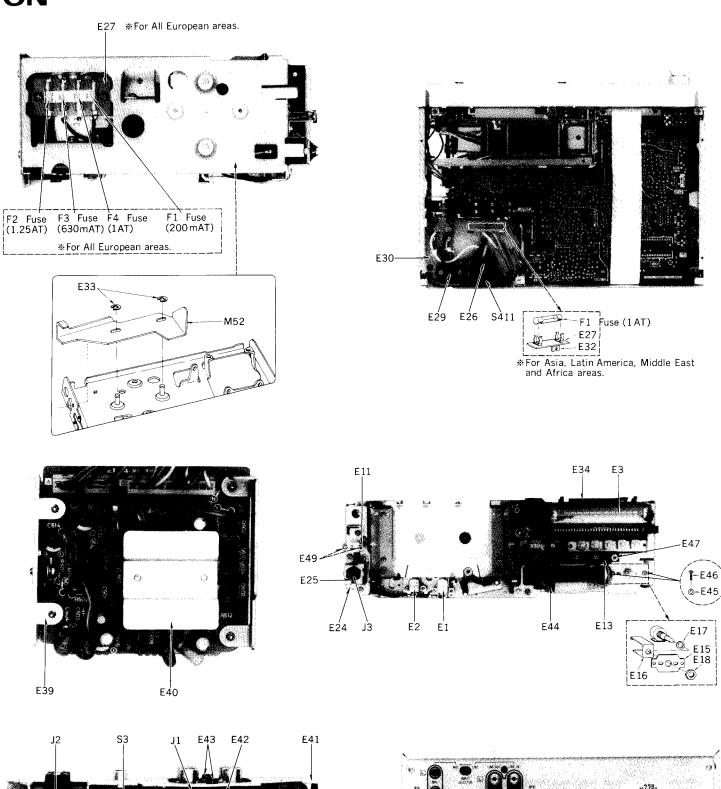






ELECTRICAL PARTS LOCATION

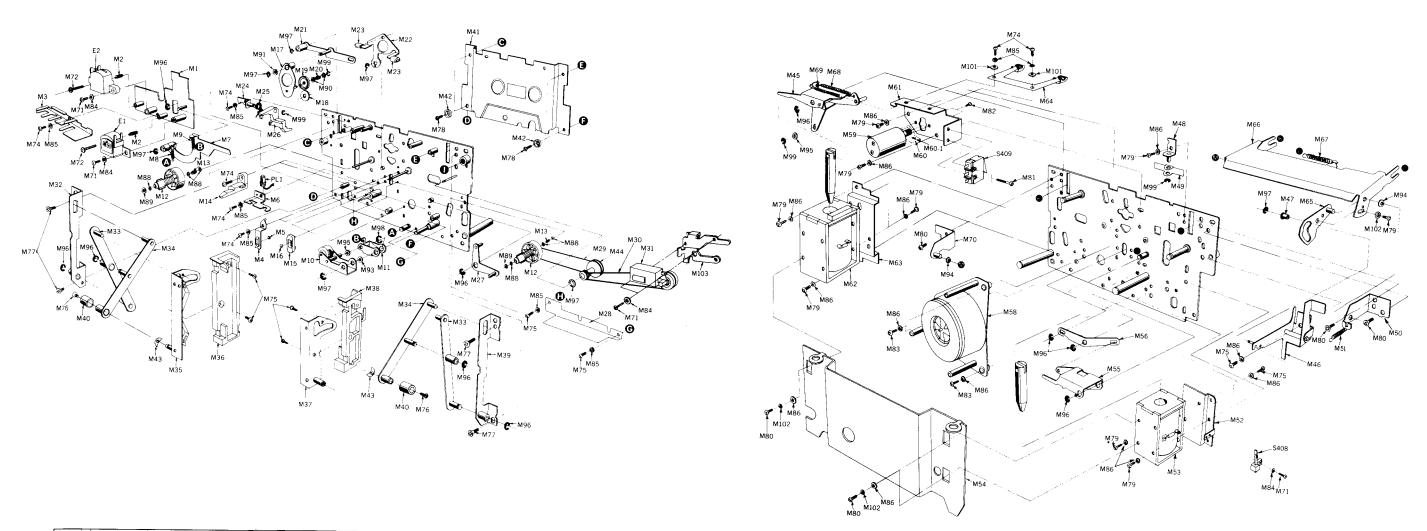




Ref. No.	Part No.	Part Name & Description
	ELEC	TRICAL PARTS
	-	
E1	WY1416ZA	Record/Playback Head
E2	QWY2133Z	Erase Head
E3	QSLS004RF	Fluorescent Level Meter
E4 🖸	△ QFC1204M	AC Power Cord
_		cept United Kingdom.
	Luropean areas ex ∆ QFC1205M	n n
	ted Kingdom.	
	△ QFC1200M	"
		Middle East and Africa areas.
A	△ QFC1208M	n n
*For Aus	tralia.	
E7	QJP1921TN	3 Pin Post
E8	0JP1922TN	6 Pin Post
E9	QJP1923TN	
E10	QMA3755	Hall IC Angle
E11	QMA3758	Switch Angle (Timer rec)
E12	QTH1148	Heat Sink
E13	QKJ0358	LED Holder (A)
	1 17	Check Pin
E14	QJT1067	
E15	QMF2070	Volume Angle
E16	QTW1166	Insulator Plate
E17	XWS9A	Washer
	1 2	
E18	QNQ1039	Nut
E19	QJT1054	Contact
E20	QJS1921TN	3 Pin Hoising
E21	QJS1923TN	9 Pin Housing
E22	QJS1922TN	6 Pin Housing
E23	QJS1924TN	12 Pin Housing
E24	OMA3753	Headphoies Angle
		Nut
E25	QNQ1051	
E26	QTWM0026	
E27 DB	QTF1039A	Fuse Holder
 ¥For All	European areas.	
(N)		n n
N For Asi	QTF1033	Middle Fact, and Africa areas
∗ For Asi	QTF1033	" Middle East, and Africa areas.
∗For Asi E28	QTF1033 a, Latin America,	
∗ For Asi	QTF1033 a, Latin America,	Middle East, and Africa areas. Cord Bushing
∗For Asi E28 DD DD (A	QTF1033 a, Latin America,	Cord Bushing
*For Asi E28 DDDA *For All	QTF1033 a, Latin America, QBJ1425A European areas a	Cord Bushing
*For Asi E28 DDDA *For All	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129	Cord Bushing nd Australia.
*For Asi E28 DBA *For All N	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129	Cord Bushing nd Australia.
*For Asi E28 D D A *For All *For Asi E29	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America,	Cord Bushing nd Australia. "" Middle East and Africa areas.
*For Asi E28 DBA *For All DA *For Asi E29	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164	Cord Bushing nd Australia. " Middle East and Africa areas. Cord Clanper
*For Asi E28 DBA *For All DA *For Asi E29	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America,	Cord Bushing nd Australia. " Middle East and Africa areas. Cord Clanper
*For Asi E28 DBA *For All DA *For Asi E29	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a	Cord Bushing nd Australia. "Middle East and Africa areas. Cord Clanper nd Australia.
*For Asi E28 DDDA *For All *For Asi E29 DDA *For All E30	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A	Cord Bushing nd Australia. "Middle East and Africa areas. Cord Clanper nd Australia. Transformer Angle
*For Asi E28 DBA *For All *For Asi E29 DBA *For All E30 E31	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite
*For Asi E28 DDDA *For All SFor Asi E29 DDBA *For All E30 E31 E32 N	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122	Cord Bushing nd Australia. " Middle East and Africa areas. Cord Clanper nd Australia. Transformer An gle Shield Plate Fuse Ange
*For Asi E28 DDDA *For All SFor Asi E29 DDBA *For All E30 E31 E32 N	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite
*For Asi E28 D D A *For All E29 D D A *For All E30 E31 E32 *For Asi	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America,	Cord Bushing and Australia. "" Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite Fuse Ange Middle East and Africa areas.
*For Asi E28 DDDA *For All SFor Asi E29 DDBA *For All E30 E31 E32 N	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122	Cord Bushing nd Australia. " Middle East and Africa areas. Cord Clanper nd Australia. Transformer An gle Shield Plate Fuse Ange
*For Asi E28 D D A *For All E29 D D A *For All E30 E31 E32 *For Asi	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America,	Cord Bushing and Australia. "" Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite Fuse Ange Middle East and Africa areas.
*For Asi E28 *For All *For Asi E29 *For All E30 E30 E31 E32 *For Asi E33 E34	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer Angle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Ring 3 a Meter Angle
*For Asi E28 DDD *For All S *For Asi E29 DDD *For All E30 E31 E32 TFOR Asi E32 E33 E34 E35	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME0147BK	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite Fuse Ange Middle East and Africa areas. Stop Rinn 3 & Meter Argle Plunger
*For Asi E28 © ® Ø *For Ali *For Asi E29 © ® Ø *For Ali E30 E31 E32 *For Asi E33 E34 E34 E35 E36	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QK0357 QME0147BK QMF2068	Cord Bushing and Australia. " Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinj 3 a Meter Angle Plunger Plunger Plunger Ingle
*For Asi E28 *For Ali *For Ali E29 *For Ali E30 *For Ali E31 E32 *For Asi E33 E34 E34 E35 E34 E35 E36 E37	QTF1033 a, Latin America, QBJ1425A European areas a QM1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME0147BK QMF2068 QML3501	Cord Bushing and Australia. " Middle East and Africa areas. Cord Clamper and Australia. Transformer An gle Shield Plate Fuse Ange Middle East and Africa areas. Stop Ring 3 & Meter Angle Plunger Plunger lyer (1)
*For Asi E28 © ® Ø *For Ali *For Asi E29 © ® Ø *For Ali E30 E31 E32 *For Asi E33 E34 E34 E35 E36	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QK0357 QME0147BK QMF2068	Cord Bushing and Australia. " Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinj 3 a Meter Angle Plunger Plunger Plunger Ingle
*For Asi E28 D D A *For Asi E29 D D A *For Asi E30 E31 E32 E32 E33 E34 E35 E36 E37 E38	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME0147BK QMF2068 QML3501 QML3501 QML3502	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Plate Fuse Ange Middle East and Africa areas. Stop Rinj'3 & Meter Argle Plunger Plunger Ingle Plunger lever (1) Plunger bever (2)
*For Asi E28 D	QTF1033 a, Latin America, QBJ1425A European areas a QM15129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QK0357 QME0147BK QMF2068 QMI3501 QMI3502 QTH1147	Cord Bushing and Australia. "" Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinn'3 a Meter Angle Plunger Plunger byer (1) Plunger byer (2) Heat Simi (A)
*For Asi E28	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QT51488 QMA3754A QT51488 QMA3752 a, Latin America, XUC3FT QKJ0357 QME01478K QMF2068 QML3501 QML3502 QTH1147 QTH1136	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinn' 3 & Meter Angle Plunger Plunger layer Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi
*For Asi E28	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME0147BK QMF2068 QMI3501 QML3502 QTH1147 QTH1136 QMA3761 QMA3761	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite Fuse Ange Middle East and Africa areas. Stop Rinj' 3 ø Meter Argle Plunger Plunger Ingle Plunger loyer Plunger sver (1) Plunger sver (2) Heat Sini (A) Heat Sini Jack Ange
*For Asi E28	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QT51488 QMA3754A QT51488 QMA3752 a, Latin America, XUC3FT QKJ0357 QME01478K QMF2068 QML3501 QML3502 QTH1147 QTH1136	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinn' 3 & Meter Angle Plunger Plunger layer Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi
*For Asi E28 *For All For All For All E29 *For All E30 E30 E31 E32 *For Asi E32 *For Asi E34 E35 E36 E37 E38 E39 E40 E41 E42	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QTS1488 QMA3754A QTS1488 QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QK0357 QME01478K QMF2068 QML3501 QML3502 QTH1147 QTH1136 QMA3761 QMF2069	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Riny 3 & Meter Argle Plunger Plunger lyeer (1) Plunger lyeer (1) Plunger lyeer (2) Heat Simi (A) Heat Simi Jack Angele
*For Asi E28	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME0147BK QMF2068 QMI3501 QML3501 QML3501 QML3501 QML3501 QML3501 QMF2069 XSN3+6BNS	Cord Bushing nd Australia. "Middle East and Africa areas. Cord Clanper nd Australia. Transformer An gle Shield Plate Fuse Ange Middle East and Africa areas. Stop Rinj¹3 Meter Argle Plunger lagle Plunger layer Plunger layer (1) Plunger laver (2) Heat Sini (A) Heat Sini Jack Ange Jack Boad Angele S Screw⊕x6
*For Asi E28 *For All For All For All E29 *For All E30 E30 E31 E32 *For Asi E32 *For Asi E34 E35 E36 E37 E38 E39 E40 E41 E42	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME0147BK QMF2068 QMI3501 QML3501 QML3501 QML3501 QML3501 QML3501 QMF2069 XSN3+6BNS	Cord Bushing nd Australia. "Middle East and Africa areas. Cord Clanper nd Australia. Transformer An gle Shield Plate Fuse Ange Middle East and Africa areas. Stop Rinj¹3 Meter Argle Plunger lagle Plunger layer Plunger layer (1) Plunger laver (2) Heat Sini (A) Heat Sini Jack Ange Jack Boad Angele S Screw⊕x6
*For Asi E28 *For All For All For All E29 *For All E30 E30 E31 E32 *For Asi E32 *For Asi E34 E35 E36 E37 E38 E39 E40 E41 E42	QTF1033 a, Latin America, QBJ1425A European areas a QM15129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QK0357 QME0147BK QMF2068 QMI3501 QMI3502 QTH1147 QTH1136 QMA3761 QMF2069 XSN3+6BN: "Silver Type"	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Riming a Meter Angle Plunger Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi Jack Ange Jack Bord Angele Screw £1×6
*For Asi E28 *For All For All For All E29 *For All E30 E30 E31 E32 *For Asi E32 *For Asi E34 E35 E36 E37 E38 E39 E40 E41 E42	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QTS11488 QM3754A QTS1488 QM33122 a, Latin America, XUC3FT QK0357 QME01478K QMF2068 QML3501 QM13502 QTH1147 QTH1136 QMA3761 XSN3+6BNS SN3+6BNS S	Cord Bushing and Australia. " Middle East and Africa areas. Cord Clamper and Australia. Transformer Angle Sheld Pitte Fuse Ange Middle East and Africa areas. Stop Rinj'3 & Meter Argle Plunger Plunger layer Plunger layer Plunger layer Plunger layer C2) Heat Simi Jack Angle Jack Boad Angele Screw⊕x6
#For Asi E28 @@@A # For All B30 # For All E30 E31 E30 # For All E30 E31 E30 E32 E33 E33 E34 E35 E36 E36 E37 E38 E39 E40 E41 E42 E43	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QTD1192 a, Latin America, QTD1164 European areas a QM3754A QTS1488 QM33122 a, Latin America, XUC3FT QKJ0357 QME01478K QMF2068 QML3502 QTH1147 QTH1136 QM63761 QMF2069 XSN3+6BNS "Silver Type" XSN3+6BNS "S	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Plate Fuse Anga Middle East and Africa areas. Stop Rinj'3 ø Meter Argle Plunger Ingle Plunger loyer Plunger loyer (1) Plunger sver (2) Heat Sini (A) Heat Sini Jack Ange Jack Boad Angele Screw⊕×6
#For Asi E28 @@@@ #For Asi E29 @@@@ #For Asi E29 @@@@ E31 E32 E33 E34 E34 E35 E36 E37 E38 E39 E40 E41 E42 E43	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME0147BK QMF2068 QML3502 QTH1147 QTH136 QMF2069 XSN3+6BNS "Silver Type" XSN3+6BNS "Silver Type" XSN3+6BNS "Black Type" XTV3+8BFN TV3+8BFN	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite Fuse Ange Middle East and Africa areas. Stop Rinn," 3 Meter Argle Plunger Plunger layer Plunger layer Plunger layer (2) Heat Sini (A) Heat Sini Jack Ange Jack Boad Angele Screw ⊕x 6 " Screw ⊕x 8
#For Asi E28 @@@A # For All B30 # For All E30 E31 E30 # For All E30 E31 E30 E32 E33 E33 E34 E35 E36 E36 E37 E38 E39 E40 E41 E42 E43	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QTD1192 a, Latin America, QTD1164 European areas a QM3754A QTS1488 QM33122 a, Latin America, XUC3FT QKJ0357 QME01478K QMF2068 QML3502 QTH1147 QTH1136 QM63761 QMF2069 XSN3+6BNS "Silver Type" XSN3+6BNS "S	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Plate Fuse Anga Middle East and Africa areas. Stop Rinj'3 ø Meter Argle Plunger Ingle Plunger loyer Plunger loyer (1) Plunger sver (2) Heat Sini (A) Heat Sini Jack Ange Jack Boad Angele Screw⊕×6
#For Asi E28	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QTS11488 QM3754A QTS1488 QM3754A QTS1488 QM3754A QTS1488 QM3754A QM7968 QM3502 QTM1147 QTM1136 QM47669 QM47669 XSN3+6BN: "Silver Type" XTV3+8BFN XSN3+6BN: XSN3+6B	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinj'3 a Meter Argle Plunger Plunger lover (1) Plunger lover (2) Heat Sirni (A) Heat Sirni Jack Ange Jack Boad An ele Screw ⊕x 6 " Screw ⊕x 8 Screw ⊕x 6
#For Asi #For Ali #Base #For Asi #	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QT51129 a, Latin America, QTD1164 European areas a QM3754A QT51488 QM33122 a, Latin America, XUC3FT QKJ0357 QME0147BK QMF2068 QML3502 QTH1147 QTH1136 QMA3761 QMF2069 XSN3+6BN: "Silver Type" XSN3+6BN: "Black Type" XTV3+8BFN XSN3+6S XWA3B	Cord Bushing nd Australia. "Middle East and Africa areas. Cord Clamper nd Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinn'3 & Meter Argle Plunger Ingle Plunger Ingle Plunger Isver (1) Plunger Isver (2) Heat Simi Jack Ange Jack Boad Angele Screw ⊕x 6 Screw ⊕x 6 Screw ⊕x 6 Washer
#For Asi E28 @@@@ #For Ali E29 @@@@ #For Ali E30 E31 E32 E33 E33 E34 E35 E36 E37 E38 E39 E44 E45 E42 E43	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, QKJ0357 QME0147BK QMF2068 QMI3501 QML3502 QTH1147 QTMF2068 QMM3761 QMF2069 XSN3+6BNI "Silver Type" XSN3+6BNI "Black Type" XSN3+6BNI "Black Type" XSN3+6BNI "Black Type" XSN3+6BNI XSN3+6	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite Fuse Ange Middle East and Africa areas. Stop Rinn' 3 a Meter Argle Plunger Plunger Ingle Plunger Ingle Plunger Isver (1) Plunger Isver (2) Heat Simi (A) Heat Simi Jack Ange Jack Board Angele Screw ① X & Screw ① X & Screw ② X & Screw ② X & X & X & X & X & X & X & X & X & X
#For Asi 228	QTF1033 a, Latin America, QBJ1425A European areas a QM101129 a, Latin America, QT01164 European areas a QMA3754A QT51488 QMA3122 a, Latin America, XUC3FT QK0357 QME01478K QMF2068 QMI3501 QMI3501 QMI3502 QTH1147 QTH1136 QMF2069 XSN3+6BNI "Silver Type" XSN3+6BNI SILVER TYPE" XSN3+6SNI XSN3+6SNI XSN3+6SNI XSN3+6SNI XSN3+5S	Cord Bushing and Australia. "" Middle East and Afric a areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Afric a areas. Stop Rinn'3 a Meter Argle Plunger Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi Jack Ange Jack Boad An ele Screw ⊕x 6 "" Screw ⊕x 6 "" Screw ⊕x 6 Washer Step Scrw Screw ⊕x 5
#For Asi E28 @@@@ #For Ali E29 @@@@ #For Ali E30 E31 E32 E33 E33 E34 E35 E36 E37 E38 E39 E44 E45 E42 E43	QTF1033 a, Latin America, QBJ1425A European areas a QTD1129 a, Latin America, QTD1164 European areas a QMA3754A QTS1488 QMA3122 a, Latin America, QKJ0357 QME0147BK QMF2068 QMI3501 QML3502 QTH1147 QTMF2068 QMM3761 QMF2069 XSN3+6BNI "Silver Type" XSN3+6BNI "Black Type" XSN3+6BNI "Black Type" XSN3+6BNI "Black Type" XSN3+6BNI XSN3+6	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pite Fuse Ange Middle East and Africa areas. Stop Rinn' 3 a Meter Argle Plunger Plunger Ingle Plunger Ingle Plunger Isver (1) Plunger Isver (2) Heat Simi (A) Heat Simi Jack Ange Jack Board Angele Screw ① X & Screw ① X & Screw ② X & Screw ② X & X & X & X & X & X & X & X & X & X
#For Asi E28	QTF1033 a, Latin America, QBJ1425A European areas a QM101129 a, Latin America, QTD1164 European areas a QMA3754A QT51148 QT5148 QMA3122 a, Latin America, XUC3FT QK0357 QME0147BK QMF2068 QML3501 QML3501 QML3501 QML3501 QML3501 QML3501 QML3501 QML3501 XSN3+6BN: "Silver Type" XSN3+6BN: "Silver Ty	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinn'3 Meter Angle Plunger Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi Jack Ange Jack Bord An æle Screw ⊕x 6 " Screw ⊕x 6 Washer Step Scrw Screw ⊕x 5 Sc
#For Asi 228	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QT51129 a, Latin America, QTD1164 European areas a QMA3754A QT51488 QMA3754A QT51488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME01478K QMF2068 QML3501 QML3502 QTH1147 QTH1136 QMA3761 XSN3+6SN: "Silver Type" XSN3+6SN: "Black Type" XSN3+6SN: "Black Type" XSN3+6SN: "Slack Type" XSN3+6SN: "Slack Type" XSN3+6SN: "Slack Type" XSN3+6SN: XSN3+8S	Cord Bushing and Australia. "" Middle East and Afric a areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Afric a areas. Stop Rinn'3 a Meter Argle Plunger Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi Jack Ange Jack Boad An ele Screw ⊕x 6 "" Screw ⊕x 6 "" Screw ⊕x 6 Washer Step Scrw Screw ⊕x 5
#For Asi 228	QTF1033 a, Latin America, QBJ1425A European areas a QM101129 a, Latin America, QTD1164 European areas a QMA3754A QT51148 QT5148 QMA3122 a, Latin America, XUC3FT QK0357 QME0147BK QMF2068 QML3501 QML3501 QML3501 QML3501 QML3501 QML3501 QML3501 QML3501 XSN3+6BN: "Silver Type" XSN3+6BN: "Silver Ty	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clanper and Australia. Transformer An gle Shield Pitte Fuse Ange Middle East and Africa areas. Stop Rinn'3 Meter Angle Plunger Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi Jack Ange Jack Bord An æle Screw ⊕x 6 " Screw ⊕x 6 Washer Step Scrw Screw ⊕x 5 Sc
#For Asi E28	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QTD1164 European areas a QM3754A QTS1488 QM33122 a, Latin America, XUC3FT QKJ0357 QME01478K QMF2068 QML3502 QTH1147 QMF2069 XSN3+6BN: "Silver Type" XSN3+6BN: "Slack Type" XSN3+6BN: XSN3+6S XWG3 XSN3+6S XWG3 XWG3 XSN3+8S XWG3 XMG3 XWG3 XMG3 XMG3 XWG3 XMG3	Cord Bushing If Australia. Cord Clanper Ind Australia. Transformer An gle Shield Plate Fuse Anga Middle East and Africa a reas. Stop Rinj'3 Meter Argle Plunger Ingle Plunger layer (1) Plunger layer (2) Heat Sini Jack Anga Jack Bord Angele Screw ⊕1×6 " Screw ⊕1×6 Washer Step Scrw Screw ⊕2×5 Screw ⊕2×5 Screw ⊕3×5 Scr
#For Asi #For Ali #For Ali #For Ali #For Ali #For Ali #For Asi ##For Asi ##Fo	QTF1033 a, Latin America, QBJ1425A European areas a QM3754A QT51129 a, Latin America, QTD1164 European areas a QMA3754A QT51488 QMA3754A QT51488 QMA3122 a, Latin America, XUC3FT QKJ0357 QME01478K QMF2068 QML3501 QML3502 QTH1147 QTH1136 QMA3761 XSN3+6SN: "Silver Type" XSN3+6SN: "Black Type" XSN3+6SN: "Black Type" XSN3+6SN: "Slack Type" XSN3+6SN: "Slack Type" XSN3+6SN: "Slack Type" XSN3+6SN: XSN3+8S	Cord Bushing and Australia. "Middle East and Africa areas. Cord Clamper and Australia. Transformer An gle Shield Plate Fuse Ange Middle East and Africa areas. Stop Rinj 3 ø Meter Argle Plunger Plunger layer (1) Plunger layer (2) Heat Simi (A) Heat Simi Jack Ange Jack Boad Angele Screw ⊕x 6 "Screw ⊕x 6 Washer Step Screw ⊕x 5 Screw ⊕

E28

EXPLODED VIEWS



Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
	MECHA	NICAL PARTS	M31	0XC0051	Tape Counter Assembly	M51	QBT1753	Playback Lever Spring	M82	X\$N2+3	Screw ⊕2×3
M1	QXK2029	Head Base Plate Assembly	1	"Silver Type"	Tape Counter Assembly	M52	QMA3591A	Plunger Angle-L	M83	XSN3+8S	Screw ⊕3×8
M2	OBCA0008	Head Spring	'	0XC0055	,,	M53	QME0147	Plunger	M84	XWA2B	Spring Washer 2 p
M3 i	OTD1261	Head Wires Clamper	1 1	"Black Type"	1	M54	QXA0786	Mechanism Reinforcement Angle	M85	XWA26B	Spring Washer 2.6 φ
M4	0BP1733	Steel Ball Holder-A	M32	QXA0703	Angle-L Assembly	M55	QXL1171	Plunger Lever-L Assembly	M86	XWA3B	Spring Washer 3 _{\phi}
M5	ODK1012	Steel Ball 2.5 d	M33	QXL1191	Link Lever-A Assembly	M56	QML3276	Plunger Lever	M87	QBW2016	Poly Washer
M6	OMA3321	Lamp Angle	M34	QXL1190	Link Lever-B Assembly	1	:	1	M88	QBW2012	n n
M7	0XL1168	Pressure Roller Lever Assembly	M35	QXA0706	Holder Angle-L Assembly	M58	QXK2172	Capstan Motor Assembly	M89	QBW2008	n .
M8	OBT1490	Eject Lever Spring	M36	QMH2027	Cassette Holder-L	M59	MKCN22AE5	Reel Motor	M90	QBW2015	n n
M9	QBT1441	Pressure Roller Spring	M37	0XA0705	Holder Angle-R Assembly	M60	QXP0574	Motor Pulley Assembly		1	
M10	QXL1166	Pressure Roller Assembly	M38	OMH2028	Cassette Holder-R		1		M91	QBW2017	"
IM IO	QXL1100	Pressure Roller Assembly	M39	QXA0704	Angle-R Assembly	M60-1	XXE26D3FZ	Set Screw	M92	QBW2018	n n
M11	OML3267	Pressure Roller Lever-1	M40	QKJ0245	Spacer-A	M61	QMA3313	Motor Angle	M93	QBW2016	n
M12	OXD0087	Reel Table	1 '	i T	Spacer-A	M62 i	QXE0249	Plunger	M94	QBW2019	n n
M13	OBC1272		M41 📵	QXH0286	Mechanism Cover	M63	QMA3312	Plunger Angle-R	M95	QBK7123	Fiber Washer
M14	OMG0054	Back Tension Spring	1 '	"Silver Type"		M64	QXH0276	Cassette Holding Cushion	M96	XUC3FT	Stop Ring 3 ϕ
M15	OMH2009	Cassette Guide	*For All Eu	uropean areas except	: United Kingdom.	M65	QXL1173	Lock Lever Assembly	M97	XUC25FT	Stop Ring 2.5 ¢
M16	ODK1006	Steel Ball Holder-B	D	, QXH0320		M66	QML3282	Connector Lever	M98	XUC5FT	Stop Ring 5 ϕ
M17	0XL1189	Steel Ball 3φ		"Black Type"	I.	M67	QBT1553	Holder Spring-R	M99	XUC2FT	Stop Ring 2¢
M18 .	OBF1260	Idler Lever Assembly	*For All Eu	ropean areas except	United Kingdom.	M68	QBT1405	Lever Spring	M100	XSN26+6	Screw ⊕2.6×6
M19		Idler Felt	BNA	QXH0277	"	M69	QBT1713	Record Spring			
	QXI0101	Idler Assembly	1 '	"Silver Type"	!		!	i	M101	XWG26	Flat Washer
M 20	QBC1308	Idler Spring	 For United	d Kingdom, Asia, Lat	in America, Middle East, Africa	M70	QXA0702	Connector Angle-R Assembly	M102	XWC3B	Lock Washer
	041104		areas and	Australia.		M71	XSN2+6	Screw ⊕2×6	M103	QMA3750	Counter Angle
M21	QXL1164	Brake Lever Assembly	M42	QMZ1213	Spacer-B	M72	QHQ1211	Head Adjustment Screw	M104	XSN2+4	Screw ⊕2×4
M22	QML3273	Brake	M43	QBP1135	Spring Washer	M74	XSN26+4	Screw ⊕2.6×4	M105	QHQ1182A	Step Screw
M23	QBG1132	Stopper Rubber	M44	QDP1811	Connection Pulley	M75	XSN26+4BV	Screw ⊕2.6×4		<u> </u>	Trop dolen
M24	QXA0714	Detection Angle Assembly	M45	QXL1165	Lever-B Assembly	M76	XSS2+4	Screw ⊕2×4			
M25	QBN1573	Detection Lever Spring	M46	QXL1311	Eject Lever Assembly	M77	XSS3+4S	Screw ⊕3×4			
M26	QML3285	Detection Lever	M47	QDP1758	Roller	M78	QHQ1185	Step Screw			
M27	QXL1172	Lever-A Assembly	M48	OXA0713	Angle Assembly	M79	XSN3+5S	Screw ±3×5	1		
M28	QTS1451	Shield Plate	M49	QML3284	Release Lever	M80	XSS3+6S				
V1 29	QDB0167	Counter Belt-A	M50	QMA3314	Connector Angle	1,000	A333 T 03	Screw ⊕3×6			
M3 0	QDB0259	Counter Belt-B	1	i ·		M81	QHQ1182	: Step Screw			

QHQ1182

SPECIFICATIONS

Pressure of pressure roller	400 ± 30 gr
Wow and flutter: JIS	Less than 0.04% (WRMS)